

EXHIBIT 28

Part I—Administrative

CHAPTER 1 SCOPE AND ADMINISTRATION

User note:

About this chapter: Chapter 1 establishes the limits of applicability of the code and describes how the code is to be applied and enforced. Chapter 1 is in two parts, Part 1—General Provisions (Sections 101–102) and Part 2—Administrative Provisions (Sections 103–113). Section 101 identifies which buildings and structures come under its purview and references other I-Codes as applicable.

This code is intended to be adopted as a legally enforceable document, and it cannot be effective without adequate provisions for its administration and enforcement. The provisions of Chapter 1 establish the authority and duties of the code official appointed by the authority having jurisdiction and also establish the rights and privileges of the design professional, contractor and property owner.

PART 1—GENERAL PROVISIONS

SECTION 101 SCOPE AND GENERAL REQUIREMENTS

[S][A] 101.1 Title. These regulations shall be known as the Seattle Fire Code, ~~((of [NAME OF JURISDICTION],))~~ hereinafter referred to as “this code.”

Throughout this code, where references are made to the International Building Code, International Residential Code, International Mechanical Code, International Fuel Gas Code, and the International Existing Building Code, those references mean those codes with Seattle amendments. Where NFPA 70 is referenced, it means the Seattle Electrical Code, which is the National Electrical Code with Seattle amendments.

[S][A] 101.2 Scope. This code establishes regulations affecting or relating to structures, vehicles, vessels, processes, premises and safeguards regarding all of the following:

1. The hazard of fire and explosion arising from the storage, handling or use of structures, materials or devices.
2. Conditions hazardous to life, property or public welfare in the occupancy of structures, vehicles, vessels, or premises.
3. Fire hazards in the structure, vehicles, vessels, or on the premises from occupancy or operation.
4. Matters related to the construction, extension, repair, alteration or removal of fire suppression or alarm systems.
5. Conditions affecting the safety of fire fighters and emergency responders during emergency operations.

[S][A] 101.2.1 Appendices. Provisions in the appendices ~~((shall))~~ do not apply unless specifically adopted.

[A] 101.3 Intent. The purpose of this code is to establish the minimum requirements consistent with nationally recognized good practice for providing a reasonable level of life safety and property protection from the hazards of fire, explosion or dangerous conditions in new and existing buildings, structures, ~~((and))~~ premises, vehicles, and vessels and to provide a reasonable level of safety to fire fighters and emergency responders during emergency operations.

This code is enacted as an exercise of the police power of The City of Seattle to protect the public peace, health, safety, and welfare, and its provisions shall be liberally construed to accomplish these purposes. The express purpose of this code is to promote the health, safety, and welfare of the general public, and not to create or otherwise establish or designate any particular class or group of persons who will or should be especially protected or benefitted by the terms of this code or ordinance.

The specific intent of this code is to place the obligation of complying with its requirements upon the owners, owner's authorized agents, or occupiers of premises, buildings, vehicles, vessels, and structures within its scope. No provision or term used in this code is intended to impose any duty whatsoever upon the City, or any of its officers or employees, for whom the implementation or enforcement of this code is discretionary, not mandatory.

[A] 101.4 Severability. If a section, subsection, sentence, clause or phrase of this code is, for any reason, held to be unconstitutional, such decision shall not affect the validity of the remaining portions of this code.

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[A] 101.5 Validity. In the event any part or provision of this code is held to be illegal or void, this shall not have the effect of making void or illegal any of the other parts or provisions hereof, which are determined to be legal; and it shall be presumed that this code would have been adopted without such illegal or invalid parts or provisions.

[S] 101.6 Point of information or code interpretation. Text marked “Point of Information” or “Code Interpretation” in the *Seattle Fire Code* is for guidance only and does not have the force of law.

SECTION 102
APPLICABILITY

[S][A] 102.1 Construction and design provisions. The construction and design provisions of this code ((shall)) apply to:

1. Structures, facilities and conditions arising after the adoption of this code.
2. Existing structures, facilities and conditions not legally in existence at the time of adoption of this code.
3. Existing structures, facilities and conditions where required in Chapter 11.
4. Existing structures, facilities and conditions that, in the opinion of the *fire code official*, constitute an ((distinct)) imminent hazard to life or property.

[A] 102.2 Administrative, operational and maintenance provisions. The administrative, operational and maintenance provisions of this code shall apply to:

1. Conditions and operations arising after the adoption of this code.
2. Existing conditions and operations.

[A] 102.3 Change of use or occupancy. A change of occupancy shall not be made unless the use or occupancy is made to comply with the requirements of this code and the *International Existing Building Code*.

Exception: Where approved by the *fire code official*, a change of occupancy shall be permitted without complying with the requirements of this code and the *International Existing Building Code*, provided that the new or proposed use or occupancy is less hazardous, based on life and fire risk, than the existing use or occupancy.

[A] 102.4 Application of building code. The design and construction of new structures shall comply with the *International Building Code*, and any *alterations*, additions, changes in use or changes in structures required by this code, which are within the scope of the *International Building Code*, shall be made in accordance therewith.

[S][A] 102.5 Application of residential code, ((Where)) If structures are designed and constructed in accordance with the *International Residential Code*, the provisions of this code ((shall)) apply as follows:

1. Construction and design provisions of this code pertaining to the exterior of the structure ((shall)) apply including, but not limited to, premises identification, fire apparatus access and water supplies. ((Where)) If interior or exterior systems or devices are installed, construction permits required by Section 105.7 ((shall)) apply.
2. Administrative, operational and maintenance provisions of this code ((shall)) apply.

[A] 102.6 Historic buildings. The provisions of this code relating to the construction, *alteration*, repair, enlargement, restoration, relocation or moving of buildings or structures shall not be mandatory for existing buildings or structures identified and classified by the state or local jurisdiction as historic buildings where such buildings or structures do not constitute a distinct hazard to life or property. Fire protection in designated historic buildings shall be provided with an *approved* fire protection plan as required in Section 1103.1.1.

[S][A] 102.7 Referenced codes and standards. The codes and standards referenced in this code ((shall be)) are those that are listed in Chapter 80, including amendments adopted by the City Council by ordinance, and such codes and standards ((shall be)) are considered to be part of the requirements of this code to the prescribed extent of each such reference and as further regulated in Sections 102.7.1 and 102.7.2.

[A] 102.7.1 Conflicts. Where conflicts occur between provisions of this code and referenced codes and standards, the provisions of this code shall apply.

[A] 102.7.2 Provisions in referenced codes and standards. Where the extent of the reference to a referenced code or standard includes subject matter that is within the scope of this code, the provisions of this code, as applicable, shall take precedence over the provisions in the referenced code or standard.

[A] 102.8 Subjects not regulated by this code. Where applicable standards or requirements are not set forth in this code, or are contained within other laws, codes, regulations, ordinances or bylaws adopted by the jurisdiction, compliance with applicable standards of the National Fire Protection Association or other nationally recognized fire safety standards, as *approved*, shall be deemed as prima facie evidence of compliance with the intent of this code. Nothing herein shall derogate from the authority of the *fire code official* to determine compliance with codes or standards for those activities or installations within the *fire code official's* jurisdiction or responsibility.

[A] **102.9 Matters not provided for.** Requirements that are essential for the public safety of an existing or proposed activity, building or structure, or for the safety of the occupants thereof, that are not specifically provided for by this code, shall be determined by the *fire code official*.

[A] **102.10 Conflicting provisions.** Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall be applicable. Where, in a specific case, different sections of this code specify different materials, methods of construction or other requirements, the most restrictive shall govern.

[A] **102.11 Other laws.** The provisions of this code shall not be deemed to nullify any provisions of local, state or federal law.

[A] **102.12 Application of references.** References to chapter or section numbers, or to provisions not specifically identified by number, shall be construed to refer to such chapter, section or provision of this code.

PART 2—ADMINISTRATIVE PROVISIONS

SECTION 103 DEPARTMENT OF FIRE PREVENTION

[A] **103.1 General.** The department of fire prevention is established within the jurisdiction under the direction of the *fire code official*. The function of the department shall be the implementation, administration and enforcement of the provisions of this code.

[S][A] **103.2 Appointment.** ~~((The))~~ A *fire code official*, other than the fire chief, shall be appointed by the fire chief, ((appointing authority of the jurisdiction)) and the *fire code official*, other than the fire chief, shall not be removed from office except for cause and after full opportunity to be heard on specific and relevant charges by and before the ((appointing authority)) fire chief.

[A] **103.3 Deputies.** In accordance with the prescribed procedures of this jurisdiction and with the concurrence of the appointing authority, the *fire code official* shall have the authority to appoint a deputy *fire code official*, other related technical officers, inspectors and other employees.

[S][A] **103.4 Liability.** ~~((The *fire code official*, member of the board of appeals, officer or employee charged with the enforcement of this code, while acting for the jurisdiction, in good faith and without malice in the discharge of the duties required by this code or other pertinent law or ordinance, shall not thereby be rendered civilly or criminally liable personally, and is hereby relieved from all personal liability for any damage accruing to persons or property as a result of an act or by reason of an act or omission in the discharge of official duties.))~~ Nothing contained in this code is intended to, nor shall be construed to, create or form the basis for any liability on the part of the City, its officers, employees or agents, for any injury or damage resulting from the failure of the owner or occupier of premises, buildings, structures, vehicles or vessels, to comply with this code, or for any injury or damage caused by any act or omission on the part of the City by its officers, employees or agents in the course of implementing or enforcing this code.

Any lawsuit brought against the City, or its officers, employees, or agents because of acts or omissions in the implementation or enforcement of this code, or other pertinent laws, ordinances, or regulations implemented through the enforcement of this code or enforced by the *fire code official*, shall, as provided by Seattle Municipal Code Chapter 4.64, be defended by the City, and any resulting judgment or settlement shall be assumed or paid by the City as provided by Chapter 4.64 and other relevant sections of the *Seattle Municipal Code*.

Limited public funds are available for the implementation and enforcement of this code. The issuance of permits, reviews of permit applications, and inspections conducted pursuant to this code are spot checks designed to encourage compliance, and are not representations, guarantees, or assurances that permits, or work undertaken pursuant to issuance of permits, comply with any applicable codes.

~~(([A] **103.4.1 Legal defense.** Any suit or criminal complaint instituted against any officer or employee because of an act performed by that officer or employee in the lawful discharge of duties and under the provisions of this code shall be defended by the legal representatives of the jurisdiction until the final termination of the proceedings. The *fire code official* or any subordinate shall not be liable for costs in an action, suit or proceeding that is instituted in pursuance of the provisions of this code, and any officer of the department of fire prevention, acting in good faith and without malice, shall be free from liability for acts performed under any of its provisions or by reason of any act or omission in the performance of official duties in connection therewith.))~~

SECTION 104 GENERAL AUTHORITY AND RESPONSIBILITIES

[S][A] **104.1 General.** The *fire code official* is hereby authorized to enforce the provisions of this code. The *fire code official* shall have the authority to render interpretations of this code and to adopt policies, procedures, rules and regulations in order to implement this code and clarify the application of its provisions. Such interpretations, policies, procedures, rules and regulations

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shall be in compliance with the intent and purpose of this code. Such policies, procedures, rules and regulations shall not have the effect of waiving requirements specifically provided for in this code.

[A] 104.2 Applications and permits. The *fire code official* is authorized to receive applications, review *construction documents* and issue permits for construction regulated by this code, issue permits for operations regulated by this code, inspect the premises for which such permits have been issued and enforce compliance with the provisions of this code.

[A] 104.3 Right of entry. Where it is necessary to make an inspection to enforce the provisions of this code, or where the *fire code official* has reasonable cause to believe that there exists in a building or on any premises any conditions or violations of this code that make the building or premises unsafe, dangerous or hazardous, the *fire code official* shall have the authority to enter the building or premises at all reasonable times to inspect or to perform the duties imposed on the *fire code official* by this code. If such building or premises is occupied, the *fire code official* shall present credentials to the occupant and request entry. If such building or premises is unoccupied, the *fire code official* shall first make a reasonable effort to locate the *owner*, the *owner's* authorized agent or other person having charge or control of the building or premises and request entry. If entry is refused, the *fire code official* has recourse to every remedy provided by law to secure entry.

[S] 104.3.1 Owner consent. With the consent of the *owner*, the *owner's* authorized agent or occupier of a building, premises, vehicle, or vessel, or pursuant to a lawfully issued warrant, the *fire code official* may enter any building, premises, vehicle, or vessel at any reasonable time to inspect or to perform the duties authorized by this code.

[S][A] ~~((104.3.1))~~ 104.3.2 Warrant. ~~((Where the *fire code official* has first obtained a proper inspection warrant or other remedy provided by law to secure entry, an))~~ An *owner*, the *owner's* authorized agent or occupant or person having charge, care or control of the building or premises shall not fail or neglect, after ~~((proper request is made as herein provided))~~ a warrant is presented to the person, to permit entry therein by the *fire code official* for the purpose of inspection and examination pursuant to this code.

[A] 104.4 Identification. The *fire code official* shall carry proper identification when inspecting structures or premises in the performance of duties under this code.

[S][A] 104.5 Notices and orders. The *fire code official* is authorized to issue such notices or orders as are required to affect compliance with this code in accordance with Sections ~~((110.1 and 110.2))~~ 110, 111 and 112.

[S][A] 104.6 Official records. The *fire code official* shall keep official records as required by Sections 104.6.1 through 104.6.4. Such official records shall be retained for not less than 5 years or for as long as the structure or activity to which such records relate remains in existence, unless otherwise provided by other laws or regulations.

[A] 104.6.1 Approvals. A record of approvals shall be maintained by the *fire code official* and shall be available for public inspection during business hours in accordance with applicable laws.

[S][A] 104.6.2 Inspections. The *fire code official* shall keep a record of ~~((each inspection made, including notices))~~ inspections, notices, violations, correction letters, and orders issued, showing the findings and disposition of each.

104.6.3 Fire records. The fire department shall keep a record of fires occurring within its jurisdiction and of facts concerning the same, including statistics as to the extent of such fires and the damage caused thereby, together with other information as required by the *fire code official*.

[S][A] 104.6.4 Administrative. Application for modification, alternative methods or materials and the final decision of the *fire code official* on any such application shall be in writing and shall be officially recorded in the permanent records of the *fire code official*.

[A] 104.7 Approved materials and equipment. Materials, equipment and devices approved by the *fire code official* shall be constructed and installed in accordance with such approval.

[A] 104.7.1 Material and equipment reuse. Materials, equipment and devices shall not be reused or reinstalled unless such elements have been reconditioned, tested and placed in good and proper working condition and approved.

[A] 104.7.2 Technical assistance. To determine the acceptability of technologies, processes, products, facilities, materials and uses attending the design, operation or use of a building or premises subject to inspection by the *fire code official*, the *fire code official* is authorized to require the *owner* or *owner's* authorized agent to provide, without charge to the jurisdiction, a technical opinion and report. The opinion and report shall be prepared by a qualified engineer, specialist, laboratory or fire safety specialty organization acceptable to the *fire code official* and shall analyze the fire safety properties of the design, operation or use of the building or premises and the facilities and appurtenances situated thereon, to recommend necessary changes. The *fire code official* is authorized to require design submittals to be prepared by, and bear the stamp of, a registered design professional.

[A] 104.8 Modifications. Where there are practical difficulties involved in carrying out the provisions of this code, the *fire code official* shall have the authority to grant modifications for individual cases, provided that the *fire code official* shall first find that special individual reason makes the strict letter of this code impractical and the modification is in compliance with the intent and purpose of this code and that such modification does not lessen health, life and fire safety requirements. The details of action granting modifications shall be recorded and entered in the files of the department of fire prevention.

[A] 104.9 Alternative materials, design and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been *approved*. An alternative material, design or method of construction shall be approved where the *fire code official* finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code in quality, strength, effectiveness, *fire resistance*, durability and safety. Where the alternative material, design or method of construction is not approved, the *fire code official* shall respond in writing, stating the reasons why the alternative was not approved.

[A] 104.9.1 Research reports. Supporting data, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall consist of valid research reports from *approved* sources.

[A] 104.9.2 Tests. Where there is insufficient evidence of compliance with the provisions of this code, or evidence that a material or method does not conform to the requirements of this code, or in order to substantiate claims for alternative materials or methods, the *fire code official* shall have the authority to require tests as evidence of compliance to be made without expense to the jurisdiction. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized and accepted test methods, the *fire code official* shall approve the testing procedures. Tests shall be performed by an *approved* agency. Reports of such tests shall be retained by the *fire code official* for the period required for retention of public records.

[S] 104.10 Fire investigations. The *fire code official* ((;)) or the fire department ((or other responsible authority)) shall have the authority to investigate the cause, origin and circumstances of any fire, explosion or other hazardous condition. Information that could be related to trade secrets or processes shall not be made part of the public record, except as directed by a court of law.

[S] 104.10.1 Authority of Fire Department fire investigators to exercise powers of police officers. Members of the Fire Department Fire Investigation Unit (FIU) that have been granted Arson Investigator/Special Police Officer (SPO) commissions by the Chief of the Seattle Police Department in accordance with City of Seattle Ordinance 109759 shall have the powers described in the ordinance and other powers described in this code.

Fire Investigation Unit (FIU) fire investigators are authorized to take immediate charge of all physical evidence relating to the cause of the fire if it appears that such fire is of incendiary or undetermined origin.

~~((104.10.1))~~ **104.10.2 Assistance from other agencies.** Police and other enforcement agencies shall have authority to render necessary assistance in the investigation of fires when requested to do so.

104.11 Authority at fires and other emergencies. The fire chief or officer of the fire department in charge at the scene of a fire or other emergency involving the protection of life or property, or any part thereof, shall have the authority to direct such operation as necessary to extinguish or control any fire, perform any rescue operation, investigate the existence of suspected or reported fires, gas leaks or other hazardous conditions or situations, or take any other action necessary in the reasonable performance of duty. In the exercise of such power, the fire chief is authorized to prohibit any person, vehicle, vessel or thing from approaching the scene, and is authorized to remove, or cause to be removed or kept away from the scene, any vehicle, vessel or thing that could impede or interfere with the operations of the fire department and, in the judgment of the fire chief, any person not actually and usefully employed in the extinguishing of such fire or in the preservation of property in the vicinity thereof.

104.11.1 Barricades. The fire chief or officer of the fire department in charge at the scene of an emergency is authorized to place ropes, guards, barricades or other obstructions across any street, alley, place or private property in the vicinity of such operation so as to prevent accidents or interference with the lawful efforts of the fire department to manage and control the situation and to handle fire apparatus.

[S] 104.11.2 Obstructing operations. Persons shall not obstruct the operations of the fire department in connection with extinguishment or control or investigation of any fire, or actions relative to other emergencies, or disobey any lawful command of the fire chief or officer of the fire department in charge of the emergency, or any part thereof, or any lawful order of a police officer assisting the fire department.

104.11.3 Systems and devices. Persons shall not render a system or device inoperative during an emergency unless by direction of the fire chief or fire department official in charge of the incident.

[S] 104.12 Vehicle impoundment and removal. The *fire code official* may order the owner or operator to remove from a street or premises, or request that the Seattle Police Department impound, a vehicle under the following conditions:

1. The vehicle poses an immediate hazard to public safety; or
2. The vehicle is transporting hazardous materials, and is left unattended on a residential street or within 500 feet (152 400 mm) of any building containing a Group A, R, E, or I occupancy, including, but not limited to, any dwelling apartment, hotel, day care, school, hospital, or health care facility; or
3. The vehicle contains or is carrying hazardous materials, or flammable or combustible liquids or gases, and is left unattended while transferring such materials, liquids, or gases by means of hose line.

104.13 Prohibited uses, sales devices. The *fire code official* may prohibit the use, display, or sale of any device, material, or object that is designed to be used in such a manner as to violate any provisions of this code, or if the use or sale of such consti-

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tutes a distinct hazard to life or property. Any materials shown by nationally recognized fire test to have a life hazard greater than that indicated by the manufacturer's literature and controlled by building code interior finish regulations or fire code decorative material regulations are either prohibited or shall be installed or used with such additional fire safety features as are necessary to substantially reduce the life hazard.

104.14 Standby fire personnel and fire watch personnel. The fire code official has the authority to require, at no cost to the jurisdiction, standby fire personnel and/or fire watch personnel if in the opinion of the fire code official potentially hazardous conditions or reductions in a life safety feature exist. The owner, agent, or lessee shall provide one or more qualified persons, as required and approved, to be on duty. Such standby fire personnel or fire watch personnel shall be subject to the fire code official's orders at all times and remain on duty during the times such places are open to the public, when such activity is being conducted, or as required by the fire code official. Fire watch personnel are not employees or agents of the city.

[S] SECTION 105 PERMITS AND CERTIFICATES

[S][A] 105.1 General. Permits shall be in accordance with Sections 105.1.1 through ~~((105.7.25))~~ 105.7.26. Certificates issued by the fire code official are revocable in accordance with the provisions of Section 105.5.

[S][A] 105.1.1 Permits required. A property owner or owner's authorized agent who intends to conduct an operation or business, or install or modify systems and equipment that are regulated by this code, or to cause any such work to be performed, shall first make application to the fire code official and obtain the required permit. Permit fees, if any, may be required to be paid prior to issuance of the permit. Failure to pay the required permit fee may result in cancellation of the permit.

[S] 105.1.2 Types of permits. There shall be two types of permits as follows:

1. Operational permit. An operational permit allows the applicant to conduct an operation or a business for which a permit is required by Section 105.6 for either:
 - 1.1. A prescribed period.
 - 1.2. Until renewed or revoked
2. ~~((Construction))~~ Installation permit. An ~~((construction))~~ installation permit allows the applicant to install or modify systems and equipment for which a permit is required by Section 105.7.

105.1.3 Multiple permits for the same location. Where more than one permit is required for the same location, the fire code official is authorized to consolidate such permits into a single permit provided that each provision is listed in the permit.

[S][A] 105.1.4 Emergency repairs. ~~((Where equipment replacement and repairs must be performed in an emergency situation, the permit application shall be submitted within the next working business day to the fire code official.))~~ If a permit is required by this code before equipment may be replaced or repaired but cannot reasonably be obtained beforehand due to an emergency, the permit application shall be submitted to the fire code official the next business day following cessation of the emergency.

[S][A] 105.1.5 Repairs. Application or notice to the fire code official is not required for ordinary repairs to structures, equipment or systems. ~~((Such))~~ Ordinary repairs ~~((shall))~~ do not include the cutting away of any wall, partition or portion thereof, the removal or change of any required means of egress, or rearrangement of parts of a structure affecting ~~((the))~~ egress requirements ~~((; nor shall))~~ or any repairs ~~((include))~~ including the addition to, alteration of, replacement or relocation of any standpipe, fire protection water supply, automatic sprinkler system, fire alarm system or other work affecting fire protection or life safety.

[S][A] 105.1.6 Annual permit. Instead of an individual construction permit for each alteration to an already approved system or equipment installation, the fire code official ~~((is authorized to))~~ may issue an annual permit ~~((on application therefor))~~ to any person, firm or corporation regularly employing one or more qualified tradespersons in the building, structure or on the premises owned or operated by the applicant for the permit.

[S][A] 105.1.6.1 Annual permit records. The person to whom an annual permit is issued shall keep a detailed record of alterations made under such annual permit. The fire code official shall have access to such records at all times or such records shall be filed with the fire code official as ~~((designated))~~ in accordance with applicable laws.

[A] 105.2 Application. Application for a permit required by this code shall be made to the fire code official in such form and detail as prescribed by the fire code official. Applications for permits shall be accompanied by such plans as prescribed by the fire code official.

[S][A] 105.2.1 Refusal to issue permit. If the application for a permit describes ~~((a use))~~ an activity that does not conform to the requirements of this code and other pertinent laws and ordinances, the fire code official ~~((shall))~~ may not issue a permit. ~~((but shall))~~ and may return the application to the applicant with the refusal to issue such permit. Such refusal shall, where requested, be in writing and shall contain the reasons for refusal.

[A] 105.2.2 Inspection authorized. Before a new operational permit is *approved*, the *fire code official* is authorized to inspect the receptacles, vehicles, buildings, devices, premises, storage spaces or areas to be used to determine compliance with this code or any operational constraints required.

[A] 105.2.3 Time limitation of application. An application for a permit for any proposed work or operation shall be deemed to have been abandoned 180 days after the date of filing, unless such application has been diligently prosecuted or a permit shall have been issued; except that the *fire code official* is authorized to grant one or more extensions of time for additional periods not exceeding 90 days each. The extension shall be requested in writing and justifiable cause demonstrated.

[S][A] 105.2.4 Action on application. The *fire code official* shall examine or cause to be examined applications for permits and amendments thereto within a reasonable time after filing. If the application or the *construction documents* do not conform to the requirements of pertinent laws, the *fire code official* ~~((shall))~~ *may* reject such application in writing, stating the reasons therefor. If the *fire code official* is satisfied that the proposed work or operation conforms to the requirements of this code and laws and ordinances applicable thereto, the *fire code official* shall issue a permit ~~((therefor))~~ as soon as practicable.

[S][A] 105.3 Conditions of a permit. The *fire code official* may condition any permit, increasing or decreasing the scope of permitted activity, and/or specifying fire safety provisions in addition to those established by this code, if the *fire code official* deems such conditions necessary to provide reasonable public safety. A permit shall constitute permission to maintain, store or handle materials; or to conduct processes that produce conditions hazardous to life or property; or to install equipment utilized in connection with such activities; or to install or modify any *fire protection system* or equipment or any other construction, equipment installation or modification in accordance with the provisions of this code where a permit is required by Section 105.6 or 105.7. Such permission shall not be construed as authority to violate, cancel or set aside any of the provisions of this code or other applicable regulations or laws of the jurisdiction.

[A] 105.3.1 Expiration. An operational permit shall remain in effect until reissued, renewed or revoked, or for such a period of time as specified in the permit. Construction permits shall automatically become invalid unless the work authorized by such permit is commenced within 180 days after its issuance, or if the work authorized by such permit is suspended or abandoned for a period of 180 days after the time the work is commenced. Before such work recommences, a new permit shall be first obtained and the fee to recommence work, if any, shall be one-half the amount required for a new permit for such work, provided that changes have not been made and will not be made in the original construction documents for such work, and provided further that such suspension or abandonment has not exceeded one year. Permits are not transferable and any change in occupancy, operation, tenancy or ownership shall require that a new permit be issued.

[A] 105.3.2 Extensions. A permittee holding an unexpired permit shall have the right to apply for an extension of the time within which the permittee will commence work under that permit where work is unable to be commenced within the time required by this section for good and satisfactory reasons. The *fire code official* is authorized to grant, in writing, one or more extensions of the time period of a permit for periods of not more than 180 days each. Such extensions shall be requested by the permit holder in writing and justifiable cause demonstrated.

[S][A] 105.3.3 ~~((Occupancy))~~ Operations prohibited before approval. ~~((The building or structure shall not be occupied))~~ Activities that require an operational permit or installations that require construction permits shall not commence or be used prior to the *fire code official* issuing a permit and conducting associated inspections indicating the applicable provisions of this code have been met.

105.3.4 Point of Information

Approval to occupy a building or structure is granted by the Seattle Department of Construction and Inspections through issuance of a certificate of occupancy or temporary certificate of occupancy. A Fire Department recommendation to issue an occupancy certificate is conditioned upon applicable provisions of this code being met.

[S][A] 105.3.4 ~~((Conditional permits))~~ Temporary certificate of occupancy. ~~((Where permits are required and upon the request of a permit applicant, the))~~ The *fire code official* is authorized to ~~((issue a conditional permit))~~ recommend to the *building code official* that a temporary certificate of occupancy be issued to occupy the premises or portion thereof before the entire work or operations on the premises ~~((is))~~ *are* completed, provided that such portion or portions will be occupied safely prior to full completion or installation of equipment and operations without endangering life or public welfare. The *fire code official* shall notify the ~~((permit applicant))~~ *building code official* in writing of any limitations or restrictions necessary to keep the ~~((permit))~~ occupied area safe. The holder of a ~~((conditional permit))~~ temporary certificate of occupancy shall proceed only to the point for which approval has been given, at the permit holder's own risk and without assurance that approval for the occupancy or the utilization of the entire premises, equipment or operations will be granted.

[A] 105.3.5 Posting the permit. Issued permits shall be kept on the premises designated therein at all times and shall be readily available for inspection by the *fire code official*.

[A] 105.3.6 Compliance with code. The issuance or granting of a permit shall not be construed to be a permit for, or an approval of, any violation of any of the provisions of this code or of any other ordinance of the jurisdiction. Permits presuming to give authority to violate or cancel the provisions of this code or other ordinances of the jurisdiction shall not be valid. The issuance of a permit based on *construction documents* and other data shall not prevent the *fire code official* from requir-

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ing the correction of errors in the *construction documents* and other data. Any addition to or alteration of *approved construction documents* shall be *approved* in advance by the *fire code official*, as evidenced by the issuance of a new or amended permit.

[A] 105.3.7 Information on the permit. The *fire code official* shall issue all permits required by this code on an *approved* form furnished for that purpose. The permit shall contain a general description of the operation or occupancy and its location and any other information required by the *fire code official*. Issued permits shall bear the signature of the *fire code official* or other *approved* legal authorization.

[A] 105.3.8 Validity of permit. The issuance or granting of a permit shall not be construed to be a permit for, or an approval of, any violation of any of the provisions of this code or of any other ordinances of the jurisdiction. Permits presuming to give authority to violate or cancel the provisions of this code or other ordinances of the jurisdiction shall not be valid. The issuance of a permit based on *construction documents*, operational documents and other data shall not prevent the *fire code official* from requiring correction of errors in the documents or other data.

[S] 105.3.9 Liability insurance. If liability insurance is required by any section of this code as a permit condition or for a license, the applicant shall maintain continuously on file with the *fire code official* for the entire period of the licensed or permitted activity, evidence of "Commercial General Liability" (CGL) insurance coverage with a minimum limit of liability of \$2,000,000 per occurrence and \$2,000,000 general aggregate and \$2,000,000 products-completed operations aggregate. Coverage shall not be subject to a deductible. Such evidence of insurance coverage shall be provided on an Acord Certificate of Liability Insurance or equivalent ("Certificate") issued to "Seattle Fire Department, 301 2nd Ave S., Seattle, WA 98104." This policy shall include an additional insured endorsement in the name of "The City of Seattle" per CG2026 or equivalent. Permittee's insurance will be primary and non-contributory. Copies of these endorsements must be attached to the Certificate. The *fire code official* may increase or decrease the above-stated minimum limits of liability.

If the issuance of a license or permit is conditioned upon obtaining CGL insurance by the applicant for such permit, the policy shall be:

1. Issued by an insurance company or companies with a best rating of A-VIII or better and authorized to do business as an insurer in Washington State pursuant to the provisions of RCW Title 48;
2. Issued for the purpose of complying with the conditions and requirements of Section 105 of the *Seattle Fire Code*;
3. Applicant shall obtain a written obligation on the part of the insurance company to provide written notice to the *fire code official* of at least 30 days of cancellation or non-renewal, except 10 days' notice of cancellation for nonpayment of premium is allowed, or as specified in RCW 48.18.290, if applicable; and
4. Subject to approval as to sufficiency and form by the City's Risk Management Division at the request of the *fire code official*.

[S][A] 105.4 Construction documents. *Construction documents* shall be in accordance with Sections 105.4.1 through ((105.4.6)) 105.4.5.

[S][A] 105.4.1 Submittals. *Construction documents* and supporting data shall be submitted in ((two)) one or more sets with each application for a permit and in such form and detail as required by the *fire code official*. The *construction documents* shall be prepared by a registered design professional where required by the ((statutes of the jurisdiction in which the project is to be constructed)) *fire code official*.

Exception: The *fire code official* is authorized to waive the submission of *construction documents* and supporting data not required to be prepared by a registered design professional if it is found that the nature of the work applied for is such that review of *construction documents* is not necessary to obtain compliance with this code.

[S][A] 105.4.1.1 Examination of documents. The *fire code official* ((shall)) may examine or cause to be examined the accompanying *construction documents* and shall ascertain by such examinations whether the work indicated and described is in accordance with the requirements of this code.

[A] 105.4.2 Information on construction documents. *Construction documents* shall be drawn to scale on suitable material. Electronic media documents are allowed to be submitted where *approved* by the *fire code official*. *Construction documents* shall be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that it will conform to the provisions of this code and relevant laws, ordinances, rules and regulations as determined by the *fire code official*.

[A] 105.4.2.1 Fire protection system shop drawings. Shop drawings for the fire protection system(s) shall be submitted to indicate compliance with this code and the *construction documents*, and shall be *approved* prior to the start of installation. Shop drawings shall contain all information as required by the referenced installation standards in Chapter 9.

[A] 105.4.3 Applicant responsibility. It shall be the responsibility of the applicant to ensure that the *construction documents* include all of the fire protection requirements and the shop drawings are complete and in compliance with the applicable codes and standards.

[A] 105.4.4 Approved documents. *Construction documents approved by the fire code official are approved with the intent that such construction documents comply in all respects with this code. Review and approval by the fire code official shall not relieve the applicant of the responsibility of compliance with this code.*

[S][A] 105.4.4.1 Phased approval. *The fire code official is authorized to issue a permit for the construction of part of a structure, system or operation before the construction documents for the whole structure, system or operation have been submitted, ((provided that)) if adequate information and detailed statements have been filed complying with pertinent requirements of this code. The holder of such permit for parts of a structure, system or operation shall proceed at the holder's own risk ((with the building operation)) and without assurance that a permit for the entire structure, system or operation will be granted.*

[S][A] 105.4.5 Amended construction documents. *Work shall be installed in accordance with the approved construction documents, and when required by the fire code official any changes made during construction that are not in compliance with the approved construction documents shall be resubmitted for approval as an amended set of construction documents, when required by the fire code official.*

[S]((A] 105.4.6 Retention of construction documents. *One set of construction documents shall be retained by the fire code official for a period of not less than 180 days from date of completion of the permitted work, or as required by state or local laws. One set of approved construction documents shall be returned to the applicant, and said set shall be kept on the site of the building or work at all times during which the work authorized thereby is in progress.))*

[S][A] 105.5 Revocation of permits and certificates. *Revocation of permits and certificates shall be in accordance with this section. ((The fire code official is authorized to revoke a permit issued under the provisions of this code where it is found by inspection or otherwise that there has been a false statement or misrepresentation as to the material facts in the application or construction documents on which the permit or approval was based including, but not limited to, any one of the following:*

- 1. The permit is used for a location or establishment other than that for which it was issued;*
- 2. The permit is used for a condition or activity other than that listed in the permit;*
- 3. Conditions and limitations set forth in the permit have been violated;*
- 4. There have been any false statements or misrepresentations as to the material fact in the application for permit or plans submitted or a condition of the permit;*
- 5. The permit is used by a different person or firm than the name for which it was issued;*
- 6. The permittee failed, refused or neglected to comply with orders or notices duly served in accordance with the provisions of this code within the time provided therein;*
- 7. The permit was issued in error or in violation of an ordinance, regulation or this code.))*

[S] 105.5.1 Nonemergency revocations, suspensions and denials of renewals. *In accordance with applicable law, the fire code official may revoke or suspend a permit or certificate or deny a request to renew any permit or certificate upon evidence submitted to the fire code official that conditions or circumstances have changed so that continued use of the permit or certificate would be unsafe or would violate this code. Such conditions or circumstances include, but are not limited to:*

- 1. The permit has been used by a person other than the person to whom the permit was issued;*
- 2. The permit has been used for a location other than that for which it was issued;*
- 3. Any of the conditions or limitations in the permit or the code have been violated;*
- 4. The permittee failed, refused, or neglected to comply within the time provided with orders or notices duly served in accordance with the provisions of this code;*
- 5. There has been a false statement or misrepresentation as to a material fact in the application or plans on which the permit or application was based; or*
- 6. The permit was issued in error or in violation of any code, regulation or other law.*

[S] 105.5.1.1 Notification. *The permit or certificate holder shall be notified in writing no later than five business days prior to the revocation, suspension or denial of a request to renew such permit or certificate.*

[S] 105.5.1.2 Requesting a hearing. *The permit or certificate holder may request in writing a hearing before the fire code official for reconsideration of the decision to revoke, suspend or deny renewal. The request shall be filed with the fire code official by 5:00 p.m. of the fifth business day following service of the notice.*

[S] 105.5.1.3 Hearing. *The hearing, if one is requested, shall be held no later than five business days after receipt of the written request.*

[S] 105.5.1.4 Final decision. *The fire code official shall issue a final decision, in writing, sustaining, modifying, or withdrawing the initial decision to revoke, suspend or deny a request to renew the permit or certificate no later than the fifth business day following such hearing. Further appeals shall be in accordance with Section 109 of this code.*

[S] 105.5.2 Emergency revocations, suspensions, and denials of requests to renew. *The fire code official may revoke, suspend or deny a request to renew a permit or certificate in emergency situations, without providing prior notice to the permit or*

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certificate holder, if an imminent fire, life-safety, or other hazard regulated by this code exists, and failure to take immediate action may cause imminent harm to humans, domestic animals, livestock, wildlife, or to the immediate or neighboring property, lands, or premises.

[S] 105.5.2.1 Surrendering permits or certificates. If such emergency is found to exist and if the *fire code official* revokes, suspends, or refuses to renew a permit or certificate, all certificates and permits shall be surrendered to the *fire code official* or the *fire code official's* authorized representative upon demand.

[S] 105.5.2.2 Suspending activities. The activities sanctioned by the suspended or revoked certificates or permits shall be suspended until the *fire code official* finds the emergency no longer exists and reinstates the permit or certificate.

[S] 105.5.2.3 Requesting an appeal. Persons whose permits or certificates have been revoked or suspended without notice may appeal the *fire code official's* action by filing a written notice of appeal to the *fire code official* by 5:00 p.m. of the fifth business day following such revocation, suspension or denial or a request to renew a permit or certificate.

[S] 105.5.2.4 Hearing. The hearing with the *fire code official* shall be no later than five business days from the receipt of such written appeal.

[S] 105.5.2.5 Final decision. The *fire code official* shall issue a final decision in writing, sustaining, modifying, or withdrawing the initial decision to revoke, suspend, or deny a request to renew the certificate or permit no later than the fifth business day following such hearing.

[S] 105.5.2.6 Further appeals. Further appeals shall be in accordance with Section 109 of this code.

[S] 105.6 Required operational permits. The *fire code official* is authorized to and may issue operational permits for the operations set forth in Sections 105.6.1 through ((105.6.50)) 105.6.54.

105.6.1 Aerosol products. An operational permit is required to manufacture, store or handle an aggregate quantity of Level 2 or Level 3 aerosol products in excess of 500 pounds (227 kg) net weight.

105.6.2 Amusement buildings. An operational permit is required to operate a special amusement building.

105.6.3 Aviation facilities. An operational permit is required to use a Group H or Group S occupancy for aircraft servicing or repair and aircraft fuel-servicing vehicles. Additional permits required by other sections of this code include, but are not limited to, hot work, hazardous materials and flammable or combustible finishes.

[S] 105.6.4 Bonfires. An operational permit is required to ignite a bonfire.

((105.6.4)) 105.6.5 Carnivals and fairs. An operational permit is required to conduct a carnival or fair.

((105.6.5)) 105.6.6 Cellulose nitrate film. An operational permit is required to store, handle or use cellulose nitrate film in a Group A occupancy.

((105.6.6)) 105.6.7 Combustible dust-producing operations. An operational permit is required to operate a grain elevator, flour starch mill, feed mill, or a plant pulverizing aluminum, coal, cocoa, magnesium, spices or sugar, or other operations producing *combustible dusts* as defined in Chapter 2.

((105.6.7)) 105.6.8 Combustible fibers. An operational permit is required for the storage and handling of *combustible fibers* in quantities greater than 100 cubic feet (2.8 m³).

Exception: A permit is not required for agricultural storage.

105.6.9 Combustible storage. An operational permit is required to store in any building or upon any premises class III or higher hazard commodities in excess of 2,500 cubic feet gross volume.

((105.6.8)) 105.6.10 Compressed gases. An operational permit is required for the storage, use or handling at *normal temperature and pressure* (NTP) of *compressed gases* in excess of the amounts listed in Table ((105.6.8)) 105.6.10.

Exception: Vehicles equipped for and using *compressed gas* as a fuel for propelling the vehicle.

**TABLE ((405.6.8)) 105.6.10
PERMIT AMOUNTS FOR COMPRESSED GASES**

TYPE OF GAS	AMOUNT (cubic feet at NTP)
Carbon dioxide used in carbon dioxide enrichment systems	875 (100 lbs.)
Carbon dioxide used in insulated liquid carbon dioxide beverage dispensing applications	875 (100 lbs.)
Corrosive	200
Flammable (except cryogenic fluids and liquefied petroleum gases)	200
Highly toxic	Any Amount
Inert and simple asphyxiant	6,000
Oxidizing (including oxygen)	504
Pyrophoric	Any Amount
Toxic	Any Amount

For SI: 1 cubic foot = 0.02832 m³.

[S] ((405.6.9)) 105.6.11 Covered and open mall buildings. An operational permit is required for:

1. The placement of retail fixtures and displays, concession equipment, displays of highly combustible goods and similar items in the mall.
2. The display of liquid- or gas-fired equipment in the mall.
3. The use of open-flame or flame-producing equipment in the mall.
4. The use of covered mall buildings for assembly purposes.

[S] ((405.6.10)) 105.6.12 Cryogenic fluids. An operational permit is required to produce, store, transport on site, use, handle or dispense *cryogenic fluids* in excess of the amounts listed in Table ((405.6.10)) 105.6.12.

Exception: Permits are not required for vehicles equipped for and using *cryogenic fluids* as a fuel for propelling the vehicle or for refrigerating the lading.

**TABLE ((405.6.10)) 105.6.12
PERMIT AMOUNTS FOR CRYOGENIC FLUIDS**

TYPE OF CRYOGENIC FLUID	INSIDE BUILDING (gallons)	OUTSIDE BUILDING (gallons)
Flammable	More than 1	60
Inert	60	500
Oxidizing (includes oxygen)	10	50
Physical or health hazard not indicated above	Any Amount	Any Amount

For SI: 1 gallon = 3.785 L.

[S] ((405.6.11)) 105.6.13 Cutting and welding. An operational permit is required to conduct cutting or welding operations within the jurisdiction. See Section 105.6.25, *Hot Work Operations*.

((405.6.12)) 105.6.14 Dry cleaning. An operational permit is required to engage in the business of dry cleaning or to change to a more hazardous cleaning solvent used in existing dry cleaning equipment.

((405.6.13)) 105.6.15 Exhibits and trade shows. An operational permit is required to operate exhibits and trade shows.

[S] ((405.6.14)) 105.6.16 Explosives. An operational permit is required for the ((manufacture,)) storage, handling, sale or use of any quantity of *explosives, explosive materials, fireworks* or pyrotechnic special effects within the scope of Chapter 56.

Exception: Storage in Group R-3 occupancies of smokeless propellant, black powder and small arms primers for personal use, not for resale and in accordance with Section 5606.

105.6.16 Point of Information

The manufacture of *explosives* is prohibited within Seattle City limits.

((405.6.15)) 105.6.17 Fire hydrants and valves. An operational permit is required to use or operate fire hydrants or valves intended for fire suppression purposes that are installed on water systems and provided with ready access from a fire apparatus access road that is open to or generally used by the public.

Exception: A permit is not required for authorized employees of the water company that supplies the system or the fire department to use or operate fire hydrants or valves.

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[S] ((105.6.16)) 105.6.18 Flammable and combustible liquids. An operational permit is required:

1. To use or operate a pipeline for the transportation within facilities of flammable or *combustible liquids*. This requirement shall not apply to the off-site transportation in pipelines regulated by the Department of Transportation (DOT) nor does it apply to piping systems.
2. To store, handle or use Class I liquids in excess of 5 gallons (19 L) in a building or in excess of 10 gallons (37.9 L) outside of a building, except that a permit is not required for the following:
 - 2.1. The storage or use of Class I liquids in the fuel tank of a motor vehicle, aircraft, motorboat, mobile power plant or mobile heating plant, or storage of approved portable motor boat fuel containers of 6 gallons or less individual capacity and 12 gallons aggregate capacity, unless such storage, in the opinion of the *fire code official*, would cause an unsafe condition.
 - 2.2. The storage or use of paints, oils, varnishes or similar flammable mixtures where such liquids are stored for maintenance, painting or similar purposes for a period of not more than 30 days.
3. To store, handle or use Class II or Class IIIA liquids in excess of 25 gallons (95 L) in a building or in excess of 60 gallons (227 L) outside a building, except for fuel oil used in connection with oil-burning equipment.
4. To store, handle or use Class IIIB liquids in tanks or portable tanks for fueling motor vehicles at motor fuel-dispensing facilities or where connected to fuel-burning equipment.

Exception: Fuel oil and used motor oil used for space heating or water heating.

5. To remove Class I or II liquids from an underground storage tank used for fueling motor vehicles by any means other than the *approved*, stationary on-site pumps normally used for dispensing purposes.
6. To operate tank vehicles, equipment, tanks, plants, terminals, wells, fuel-dispensing stations, refineries, distilleries and similar facilities where flammable and *combustible liquids* are produced, processed, transported, stored, dispensed or used.
7. To place temporarily out of service (for more than 90 days) an underground, protected above-ground or above-ground flammable or *combustible liquid* tank.
8. To change the type of contents stored in a flammable or *combustible liquid* tank to a material that poses a greater hazard than that for which the tank was designed and constructed.
9. To manufacture, process, blend or refine flammable or *combustible liquids*.
10. To engage in the dispensing of liquid fuels into the fuel tanks of motor vehicles at commercial, industrial, governmental or manufacturing establishments in accordance with Section 5706.5.4 or to engage in on-demand mobile fueling operations in accordance with Section 5707.
11. To utilize a site for the dispensing of liquid fuels from tank vehicles into the fuel tanks of motor vehicles, marine craft and other special equipment at commercial, industrial, governmental or manufacturing establishments in accordance with Section 5706.5.4 or, where required by the fire code official, to utilize a site for on-demand mobile fueling operations in accordance with Section 5707.
12. To engage in the business of removing, abandoning, or otherwise disposing of residential heating oil tanks.

((105.6.17)) 105.6.19 Floor finishing. An operational permit is required for floor finishing or surfacing operations exceeding 350 square feet (33 m²) using Class I or Class II liquids.

((105.6.18)) 105.6.20 Fruit and crop ripening. An operational permit is required to operate a fruit- or crop-ripening facility or conduct a fruit-ripening process using ethylene gas.

[S] ((105.6.19)) 105.6.21 Fumigation and insecticidal fogging. An operational permit is required to operate a business of fumigation or insecticidal fogging, and to maintain a room, vault, freight container, or chamber in which a toxic or flammable fumigant is used.

((105.6.20)) 105.6.22 Hazardous materials. An operational permit is required to store, transport on site, dispense, use or handle hazardous materials in excess of the amounts listed in Table ((105.6.20)) 105.6.22.

**TABLE ((405.6.20)) 105.6.22
PERMIT AMOUNTS FOR HAZARDOUS MATERIALS**

TYPE OF MATERIAL	AMOUNT
Combustible liquids	See Section ((405.6.16)) 105.6.18
Corrosive materials	
Gases	See Section ((405.6.8)) 105.6.10
Liquids	55 gallons
Solids	1000 pounds
Explosive materials	See Section ((405.6.14)) 105.6.16
Flammable materials	
Gases	See Section ((405.6.8)) 105.6.10
Liquids	See Section ((405.6.16)) 105.6.18
Solids	100 pounds
Highly toxic materials	
Gases	See Section ((405.6.8)) 105.6.10
Liquids	Any Amount
Solids	Any Amount
Organic peroxides	
Liquids	
Class I	Any Amount
Class II	Any Amount
Class III	1 gallon
Class IV	2 gallons
Class V	No Permit Required
Solids	
Class I	Any Amount
Class II	Any Amount
Class III	10 pounds
Class IV	20 pounds
Class V	No Permit Required
Oxidizing materials	
Gases	See Section ((405.6.8)) 105.6.10
Liquids	
Class 4	Any Amount
Class 3	1 gallons ^a
Class 2	10 gallons
Class 1	55 gallons
Solids	
Class 4	Any Amount
Class 3	10 pounds ^b
Class 2	100 pounds
Class 1	500 pounds
Pyrophoric materials	
Gases	Any Amount
Liquids	Any Amount
Solids	Any Amount
Toxic materials	
Gases	See Section ((405.6.8)) 105.6.10
Liquids	10 gallons
Solids	100 pounds
Unstable (reactive) materials	
Liquids	
Class 4	Any Amount
Class 3	Any Amount
Class 2	5 gallons
Class 1	10 gallons
Solids	
Class 4	Any Amount
Class 3	Any Amount
Class 2	50 pounds
Class 1	100 pounds

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**TABLE ((105.6.20)) 105.6.22—continued
PERMIT AMOUNTS FOR HAZARDOUS MATERIALS**

TYPE OF MATERIAL	AMOUNT
Water-reactive materials	
Liquids	
Class 3	Any Amount
Class 2	5 gallons
Class 1	55 gallons
Solids	
Class 3	Any Amount
Class 2	50 pounds
Class 1	500 pounds

For SI: 1 gallon = 3.785 L, 1 pound = 0.454 kg.

- a. 20 gallons where Table 5003.1.1(1) Note k applies and hazard identification signs in accordance with Section 5003.5 are provided for quantities of 20 gallons or less.
- b. 200 pounds, where Table 5003.1.1(1) Note k applies and hazard identification signs in accordance with Section 5003.5 are provided for quantities of 200 pounds or less.

((105.6.24)) 105.6.23 HPM facilities. An operational permit is required to store, handle or use hazardous production materials.

((105.6.22)) 105.6.24 High-piled storage. An operational permit is required to use a building or portion thereof with more than 500 square feet (46 m²), including aisles, of *high-piled storage*.

[S] ((105.6.23)) 105.6.25 Hot work operations. An operational permit is required for hot work including, but not limited to:

- Public exhibitions and demonstrations where hot work is conducted.
- Use of portable hot work equipment. ~~((inside a structure.))~~

Exception: ~~((Work that is conducted under a construction permit.))~~ Approved self-contained torch assemblies or similar appliances using LP-gas in accordance with the following:

- LP-gas cylinders that comply with UL 147A, Standard for Nonrefillable (Disposable) Type Fuel Gas Cylinder Assemblies.
 - LP-gas cylinders that have a maximum water capacity of 2.7 lb (1.2 kg).
 - The maximum aggregate water capacity of LP-gas cylinders in storage (e.g., not connected for use) and use does not exceed 2.7 lb (1.2 kg) per control area.
- Fixed-site hot work equipment, such as welding booths.
 - Hot work conducted within a wildfire risk area.
 - Application of roof coverings with the use of an open-flame device.
 - Where *approved*, the *fire code official* shall issue a permit to carry out a hot work program. This program allows *approved* personnel to regulate their facility's hot work operations. The *approved* personnel shall be trained in the fire safety aspects denoted in this chapter and shall be responsible for issuing permits requiring compliance with the requirements found in Chapter 35. These permits shall be issued only to their employees or hot work operations under their supervision.
 - Hot work on storage tanks, piping and associated systems containing or previously containing flammable or combustible liquids, or other hazardous materials that could present a fire or explosion hazard.
 - Hot work on vessels.

((105.6.24)) 105.6.26 Industrial ovens. An operational permit is required for operation of industrial ovens regulated by Chapter 30.

((105.6.25)) 105.6.27 Lumber yards and woodworking plants. An operational permit is required for the storage or processing of lumber exceeding 100,000 board feet (8,333 ft³) (236 m³).

((105.6.26)) 105.6.28 Liquid- or gas-fueled vehicles or equipment in assembly buildings. An operational permit is required to display, operate or demonstrate liquid- or gas-fueled vehicles or equipment in assembly buildings.

[S] ((105.6.27)) 105.6.29 LP-gas. An operational permit is required for:

- Storage and use of LP-gas.

Exceptions:

- A permit is not required for individual containers with a 500-gallon (1893 L) water capacity or less or multiple container systems having an aggregate quantity not exceeding 500 gallons (1893 L), serving occupancies in Group R-3.

2. A permit is not required for LP-gas containers having a water capacity not exceeding 48 pounds [nominal 20 pounds (9 kg) LP-gas] connected to a LP-gas grill unless located at a public assembly or on a public way, or if used for commercial purposes.
3. A permit is not required for storage of up to three spare forklift containers each having a maximum individual water capacity of 104 pounds (10 gallons LP-gas).

2. Operation of cargo tankers that transport LP-gas.

~~((105.6.28))~~ **105.6.30 Magnesium.** An operational permit is required to melt, cast, heat treat or grind more than 10 pounds (4.54 kg) of magnesium.

~~[S] ((105.6.29 Miscellaneous combustible storage. An operational permit is required to store in any building or on any premises in excess of 2,500 cubic feet (71 m³) gross volume of combustible empty packing cases, boxes, barrels or similar containers, combustible pallets, rubber tires, rubber, cork or similar combustible material.))~~

105.6.31 Marine terminal and container freight stations. An annual operational permit is required to handle or temporarily locate containers, tanks, or cylinders of hazardous materials at marine terminals and container freight stations located within the Seattle city limits.

~~[W][S] ((105.6.30))~~ **105.6.32 Mobile food preparation vehicles.** A permit is required for mobile food preparation vehicles equipped with appliances that produce smoke or grease-laden vapors or utilize LP-gas systems or CNG systems.

~~((105.6.34))~~ **105.6.33 Motor fuel-dispensing facilities.** An operational permit is required for the operation of automotive, marine and fleet motor fuel-dispensing facilities.

~~[S] ((105.6.32))~~ **105.6.34 Open burning.** ~~((An operational permit is required for the kindling or maintaining of an open fire or a fire on any public street, alley, road, or other public or private ground. Instructions and stipulations of the permit shall be adhered to.))~~ Open burning is prohibited in the city of Seattle.

~~((Exception: Recreational fires.))~~

~~((105.6.33))~~ **105.6.35 Open flames and torches.** An operational permit is required to remove paint with a torch; or to use a torch or open-flame device in a wildfire risk area.

~~[S] ((105.6.34))~~ **105.6.36 ((Open flames and candles)) Candles.** An operational permit is required to use open flames or candles in connection with assembly areas, dining areas of restaurants or drinking establishments.

Exception: A separate open flame and candle permit is not required at a facility with a valid place of assembly permit.

105.6.37 Open flames, open flame devices and flame effects before an audience. An operational permit is required to use of open flames, open flame devices, flame effects, fire or burning before an audience in connection with Group A, B or E occupancies, covered malls and outdoor assembly events.

Exception: A permit is not required for the use of flame effects outdoors, unless located at an outdoor assembly event.

~~((105.6.35))~~ **105.6.38 Organic coatings.** An operational permit is required for any organic-coating manufacturing operation producing more than 1 gallon (4 L) of an organic coating in one day.

~~[S] ((105.6.36))~~ **105.6.39 Outdoor assembly event.** An operational permit is required to conduct an outdoor assembly event, ~~((where planned attendance exceeds 1,000 persons.))~~

~~[S] ((105.6.37))~~ **105.6.40 Places of assembly.** An operational permit is required to operate a place of assembly with an occupant load of 100 or more.

~~((105.6.38))~~ **105.6.41 Plant extraction systems.** An operational permit is required to use plant extraction systems.

~~((105.6.39))~~ **105.6.42 Private fire hydrants.** An operational permit is required for the removal from service, use or operation of private fire hydrants.

Exception: A permit is not required for private industry with trained maintenance personnel, private fire brigade or fire departments to maintain, test and use private hydrants.

~~((105.6.40))~~ **105.6.43 Pyrotechnic special effects material.** An operational permit is required for use and handling of pyrotechnic special effects material.

~~((105.6.41))~~ **105.6.44 Pyroxylin plastics.** An operational permit is required for storage or handling of more than 25 pounds (11 kg) of cellulose nitrate (pyroxylin) plastics, and for the assembly or manufacture of articles involving pyroxylin plastics.

~~[S] ((105.6.42))~~ **105.6.45 Refrigeration equipment.** An operational permit is required to operate a mechanical refrigeration unit or system regulated by Chapter 6.

Exception: Refrigeration systems that have a valid annual mechanical permit from the Seattle Department of Construction and Inspections.

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~~((105.6.43))~~ **105.6.46 Repair garages, ~~((and motor fuel dispensing facilities.))~~** An operational permit is required for operation of repair garages.

~~((105.6.44))~~ **105.6.47 Rooftop heliports.** An operational permit is required for the operation of a rooftop heliport.

[S] ~~((105.6.45))~~ **105.6.48 Spraying or dipping.** An operational permit is required to conduct a spraying or dipping operation utilizing flammable or combustible liquids, or the application of combustible powders regulated by Chapter 24.

Exception: Mobile spray coaters licensed by, and meeting the requirements of, the Puget Sound Clean Air Agency.

105.6.48 Point of Information

A no-fee operational permit is required for spraying operations utilizing water-based paints in accordance with Chapter 24.

[S] ~~((105.6.46))~~ **105.6.49 Storage of tires, scrap tires and tire byproducts.** An operational permit is required to establish, conduct or maintain outdoor storage of 500 or more tires and scrap tires ~~((and))~~ or tire byproducts that exceeds 2,500 cubic feet (71 m³) of total volume ~~((of scrap tires))~~, and for indoor storage of tires and tire byproducts when required by Section 105.6.9 or 105.6.24.

[S] **105.6.50 Temporary assembly occupancy.** An operational permit is required to use any building or structure, or portion thereof, other than for established Group A occupancies for assembly purposes where the occupant load is more than 50 persons. Plans shall be submitted to the *fire code official* at least 30 days prior to the event where temporary *alterations* are made to the existing *means of egress*. The number of such permits for any building or structure, or portion thereof, is limited to one per quarter. Additional permits may be issued where application for a change of use for the building, or structure, or portion thereof, has been approved by the Seattle Department of Construction and Inspections (SDCI) with the approval of SDCI.

[S] ~~((105.6.47))~~ **105.6.51 Temporary membrane structures and tents.** ~~((An operational permit is required to operate an air-supported temporary membrane structure, a temporary special event structure or a tent having an area in excess of 400 square feet (37 m²)). See Section 105.7.25.~~

Exceptions:

1. Tents used exclusively for recreational camping purposes.
2. Tents open on all sides, which comply with all of the following:
 - 2.1. Individual tents having a maximum size of 700 square feet (65 m²);
 - 2.2. The aggregate area of multiple tents placed side by side without a fire break clearance of not less than 12 feet (3658 mm) shall not exceed 700 square feet (65 m²) total;
 - 2.3. A minimum clearance of 12 feet (3658 mm) to structures and other tents shall be provided;))

~~((105.6.48))~~ **105.6.52 Tire-rebuilding plants.** An operational permit is required for the operation and maintenance of a tire-rebuilding plant.

~~((105.6.49))~~ **105.6.53 Waste handling.** An operational permit is required for the operation of wrecking yards, junk yards and waste material-handling facilities.

~~((105.6.50))~~ **105.6.54 Wood products.** An operational permit is required to store chips, hogged material, lumber or plywood in excess of 200 cubic feet (6 m³).

[S][A] **105.7 Required ~~((construction))~~ installation permits.** The *fire code official* is authorized to and may issue ~~((construction))~~ installation permits for work as set forth in Sections 105.7.1 through 105.7.25.

105.7 Point of Information

Building permits for construction are issued by the Seattle Department of Construction and Inspections (SDCI). The *fire code* does not require separate Fire Department-issued construction permits for the following systems and equipment:

- Automatic fire-extinguishing systems.
- Battery systems.
- Capacitor energy storage systems.
- Emergency responder radio coverage systems.
- Fire alarm and detection systems and related equipment.
- Fire pump and related equipment.
- Fuel cell power systems.
- Gas detection systems.
- Motor vehicle repair rooms or booths.
- Plant extraction systems.
- Smoke control or smoke exhaust systems.
- Solar photovoltaic power systems.
- Standpipe systems.

Fire Department Installation and Operational Permits

If a Fire Department installation permit is required and an operational permit is also required, the approved installation permit is considered the initial operating permit, valid for one year.

[S][A] 105.7.1 Automatic fire-extinguishing systems. A construction permit issued by the Seattle Department of Construction and Inspections is required for installation of or modification to an automatic fire-extinguishing system. Maintenance performed in accordance with this code is not considered to be a modification and does not require a permit.

[S][A] 105.7.2 Battery systems. A construction permit issued by the Seattle Department of Construction and Inspections is required to install stationary storage battery systems regulated by Section 1206.2.

[S][A] 105.7.3 Capacitor energy storage systems. A construction permit issued by the Seattle Department of Construction and Inspections is required to install capacitor energy storage systems regulated by Section 1206.3.

[S][A] 105.7.4 Compressed gases. Where the compressed gases in use or storage exceed the amounts listed in Table ((405.6.8)) 105.6.10, ((a-construction)) an installation permit is required to install, repair damage to, abandon, remove, place temporarily out of service, or close or substantially modify a *compressed gas* system.

Exceptions:

1. Routine maintenance.
2. For emergency repair work performed on an emergency basis, application for permit shall be made within two working days of commencement of work.

[S][A] 105.7.5 Cryogenic fluids. ((A-construction)) An installation permit is required for installation of or *alteration* to outdoor stationary *cryogenic fluid* storage systems where the system capacity exceeds the amounts listed in Table ((405.6.10)) 105.6.12. Maintenance performed in accordance with this code is not considered to be an *alteration* and does not require a construction permit.

[S][A] 105.7.6 Emergency responder radio coverage system. A construction permit issued by the Seattle Department of Construction and Inspections is required for installation of or modification to emergency responder radio coverage systems and related equipment. Maintenance performed in accordance with this code is not considered to be a modification and does not require a construction permit.

[S][A] 105.7.7 Fire alarm and detection systems and related equipment. A construction permit issued by the Seattle Department of Construction and Inspections is required for installation of or modification to fire alarm and detection systems and related equipment. Maintenance performed in accordance with this code is not considered to be a modification and does not require a construction permit.

[S][A] 105.7.8 Fire pumps and related equipment. A construction permit issued by the Seattle Department of Construction and Inspections is required for installation of or modification to fire pumps and related fuel tanks, jockey pumps, controllers and generators. Maintenance performed in accordance with this code is not considered to be a modification and does not require a construction permit.

[S][A] 105.7.9 Flammable and combustible liquids. ((A-construction)) An installation permit is required:

1. To install, repair or modify a pipeline for the transportation of flammable or *combustible liquids*.
2. To install, construct or alter tank vehicles, equipment, tanks, plants, terminals, wells, fuel-dispensing stations, refineries, distilleries and similar facilities where flammable and *combustible liquids* are produced, processed, transported, stored, dispensed or used.
3. To install, alter, remove, abandon or otherwise dispose of a flammable or *combustible liquid* tank.

[S][A] 105.7.10 Fuel cell power systems. A construction permit issued by the Seattle Department of Construction and Inspections is required to install *stationary fuel cell power systems*.

[S][A] 105.7.11 Gas detection systems. A construction permit issued by the Seattle Department of Construction and Inspections is required for the installation of or modification to gas detection systems. Maintenance performed in accordance with this code is not considered a modification and shall not require a permit.

[S][A] 105.7.12 Gates and barricades across fire apparatus access roads. ((A-construction)) An installation permit is required for the installation of or modification to a gate or barricade across a fire apparatus access road.

[S][A] 105.7.13 Hazardous materials. ((A-construction)) An installation permit is required to install, repair damage to, abandon, remove, place temporarily out of service, or close or substantially modify a storage facility or other area regulated by Chapter 50 where the hazardous materials in use or storage exceed the amounts listed in Table ((405.6.20)) 105.6.22.

Exceptions:

1. Routine maintenance.
2. For repair work performed on an emergency basis, application for permit shall be made within two working days of commencement of work.

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[S][A] 105.7.14 High-piled combustible storage. ~~((A-construction))~~ An installation permit is required for the installation of or modification to a structure exceeding 500 square feet (46 m²), including aisles, for high-piled combustible storage. Maintenance performed in accordance with this code is not considered to be a modification and does not require a construction permit.

[S][A] 105.7.15 Industrial ovens. ~~((A-construction))~~ An installation permit is required for installation of industrial ovens covered by Chapter 30.

Exceptions:

1. Routine maintenance.
2. For repair work performed on an emergency basis, application for permit shall be made within two working days of commencement of work.

[S][A] 105.7.16 LP-gas. ~~((A-construction))~~ An installation permit is required for installation of or modification to an LP-gas system. Maintenance performed in accordance with this code is not considered to be a modification and does not require a permit.

[S][A] 105.7.17 Motor vehicle repair rooms and booths. A construction permit issued by the Seattle Department of Construction and Inspections is required to install or modify a motor vehicle repair room or booth. Maintenance performed in accordance with this code is not considered to be a modification and does not require a permit.

[S][A] 105.7.18 Plant extraction systems. A construction permit issued by the Seattle Department of Construction and Inspections is required for installation of or modification to plant extraction systems. Maintenance performed in accordance with this code is not considered to be a modification and does not require a permit.

[A] 105.7.19 Private fire hydrants. A construction permit is required for the installation or modification of private fire hydrants. Maintenance performed in accordance with this code is not considered to be a modification and does not require a permit.

[S][A] 105.7.20 Smoke control or smoke exhaust systems. Construction permits issued by the Seattle Department of Construction and Inspections are required for installation of or alteration to smoke control or smoke exhaust systems. Maintenance performed in accordance with this code is not considered to be an alteration and does not require a permit.

[S][A] 105.7.21 Solar photovoltaic power systems. A construction permit issued by the Seattle Department of Construction and Inspections is required to install or modify solar photovoltaic power systems. Maintenance performed in accordance with this code is not considered to be a modification and does not require a permit.

[S][A] 105.7.22 Special event structure. A single ~~((construction))~~ installation permit is required to erect and take down a temporary special event structure.

[S][A] 105.7.23 Spraying or dipping. ~~((A-construction))~~ An installation permit is required to install or modify a spray room, dip tank or booth. Maintenance performed in accordance with this code is not considered to be a modification and does not require a permit.

[S][A] 105.7.24 Standpipe systems. A construction permit issued by the Seattle Department of Construction and Inspections is required for the installation, modification or removal from service of a standpipe system. Maintenance performed in accordance with this code is not considered to be a modification and does not require a permit.

[S][A] 105.7.25 Temporary membrane structures and tents. ~~((A-construction))~~ An installation permit is required to erect an air-supported temporary membrane structure, a temporary stage canopy or a tent having an area in excess of 400 square feet (37 m²) ~~((:))~~ if all of the conditions are met:

1. The membrane structure or tent will be erected for a time period not to exceed four weeks;
2. The membrane structure or tent will be located at least 200 feet from shorelines;
3. No stage, platform, bleacher or similar structure greater than 4 feet in height will be installed inside the membrane structure or tent;
4. The membrane structure or tent will not be attached to a building or other permanent structure for support; and
5. The installation permit does not propose foul weather use, or a structure of unusual shape, unusual location or large area or height.

Exceptions:

1. Tents used exclusively for recreational camping purposes.
2. Funeral tents and curtains, or extensions attached thereto, when used for funeral services.
3. Tents and awnings open on all sides, which comply with all of the following:
 - 3.1. Individual tents shall have a maximum size of 700 square feet (65 m²).
 - 3.2. The aggregate area of multiple tents placed side by side without a fire break clearance of not less than 12 feet (3658 mm) shall not exceed 700 square feet (65 m²) total.

3.3. A minimum clearance of 12 feet (3658 mm) to structures and other tents shall be maintained.

105.7.25 Point of Information

If any one of the above-noted conditions (items 1-5) is not met, a permit for the membrane structure or tent may be required from the Seattle Department of Construction and Inspections.

[W] 105.7.26 Underground supply piping for automatic sprinkler system. A construction permit is required for the installation of the portion of the dedicated underground water supply piping, public or private, supplying a water-based fire protection system. The permit shall apply to all underground piping and appurtenances downstream of the first control valve on the lateral piping or service line from the distribution main to one foot (25 mm) above finished floor of the facility with the fire protection system. Maintenance performed in accordance with this code is not considered to be a modification and does not require a permit.

Exceptions:

1. When the underground piping is installed by the aboveground piping contractor.
2. Underground piping serves a fire protection system installed in accordance with NFPA 13D.

SECTION 106 FEES

[S][A] 106.1 Fees. A permit shall not be issued until the fees have been paid, nor shall an amendment to a permit be released until the additional fee, if any, has been paid.

Exception: Those permits for which the *fire code official*, pursuant to the fee ordinance, authorizes invoices to be sent for the fees after the permits are issued.

[S][A] 106.2 Schedule of permit fees. A fee for each permit shall be paid as required, in accordance with the schedule ((as)) established by the ((applicable)) governing authority.

[S][A] ((106.3 Work commencing before permit issuance. A person who commences any work, activity or operation regulated by this code before obtaining the necessary permits shall be subject to an additional fee established by the applicable governing authority, which shall be in addition to the required permit fees:))

[S][A] 106.((4))3 Related fees. The payment of the fee for the construction, alteration, removal or demolition of work done in connection ((to)) or concurrently with the work or activity authorized by a permit ((shall)) does not relieve the applicant or holder of the permit from the payment of other fees that are prescribed by law.

[A] 106.((5))4 Refunds. The applicable governing authority is authorized to establish a refund policy.

SECTION 107 INSPECTIONS

[A] 107.1 Inspection authority. The *fire code official* is authorized to enter and examine any building, structure, marine vessel, vehicle or premises in accordance with Section 104.3 for the purpose of enforcing this code.

[A] 107.2 Inspections. The *fire code official* is authorized to conduct such inspections as are deemed necessary to determine the extent of compliance with the provisions of this code and to approve reports of inspection by *approved* agencies or individuals. Reports of such inspections shall be prepared and submitted in writing for review and approval. Inspection reports shall be certified by a responsible officer of such *approved* agency or by the responsible individual. The *fire code official* is authorized to engage such expert opinion as deemed necessary to report on unusual, detailed or complex technical issues subject to the approval of the governing body.

[A] 107.2.1 Inspection requests. It shall be the duty of the holder of the permit or their duly authorized agent to notify the *fire code official* when work is ready for inspection. It shall be the duty of the permit holder to provide access to and means for inspections of such work that are required by this code.

[A] 107.2.2 Approval required. Work shall not be done beyond the point indicated in each successive inspection without first obtaining the approval of the *fire code official*. The *fire code official*, on notification, shall make the requested inspections and shall either indicate the portion of the construction that is satisfactory as completed, or notify the permit holder or his or her agent wherein the same fails to comply with this code. Any portions that do not comply shall be corrected, and such portion shall not be covered or concealed until authorized by the *fire code official*.

[A] 107.3 Concealed work. It shall be the duty of the permit applicant to cause the work to remain visible and able to be accessed for inspection purposes. Where any installation subject to inspection prior to use is covered or concealed without having first been inspected, the *fire code official* shall have the authority to require that such work be made visible and able to be

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accessed for inspection. Neither the *fire code official* nor the jurisdiction shall be liable for expense entailed in the removal or replacement of any material required to allow inspection.

[A] 107.4 Approvals. Approval as the result of an inspection shall not be construed to be an approval of a violation of the provisions of this code or of other ordinances of the jurisdiction. Inspections presuming to give authority to violate or cancel provisions of this code or of other ordinances of the jurisdiction shall not be valid.

[S] 107.5 Special inspections. The *fire code official* is authorized to appoint qualified persons or agencies having special technical skills as special inspectors or plan reviewers and accept their inspection, plan review and evaluation of specialized fire protection equipment or systems.

[S] 107.5.1 Other inspections. The *fire code official* is authorized to accept inspections performed by other jurisdictions and agencies and honor permits and certificates issued by other jurisdictions for activities regulated by this code, upon presentation to the *fire code official* of satisfactory evidence that such inspections, permits and certificates are substantially in accord with the fire safety requirements of this code.

SECTION 108 MAINTENANCE

[A] 108.1 Maintenance of safeguards. Where any device, equipment, system, condition, arrangement, level of protection, or any other feature is required for compliance with the provisions of this code, or otherwise installed, such device, equipment, system, condition, arrangement, level of protection, or other feature shall thereafter be continuously maintained in accordance with this code and applicable referenced standards.

[A] 108.2 Testing and operation. Equipment requiring periodic testing or operation to ensure maintenance shall be tested or operated as specified in this code.

[A] 108.2.1 Reinspection and testing. Where any work or installation does not pass an initial test or inspection, the necessary corrections shall be made so as to achieve compliance with this code. The work or installation shall then be resubmitted to the *fire code official* for inspection and testing.

[S][A] 108.3 Recordkeeping. A record of periodic inspections, tests, servicing and other operations and maintenance shall be maintained on the premises or other *approved* location for not less than 3 years, or a different period of time where specified in this code or referenced standards. ~~((Records))~~ In accordance with applicable law, records shall be made available for inspection by the *fire code official*, and a copy of the records shall be provided to the *fire code official* on request.

The *fire code official* is authorized to prescribe the form and format of such recordkeeping. The *fire code official* is authorized to require that certain required records be filed with the *fire code official*.

[A] 108.4 Supervision. Maintenance and testing shall be under the supervision of a responsible person who shall ensure that such maintenance and testing are conducted at specified intervals in accordance with this code.

[S] 108.5 Rendering equipment inoperable. Portable or fixed fire-extinguishing systems or devices, and fire-warning systems, shall be provided with ready access and shall not be rendered inoperative, except as necessary during emergencies, maintenance, repairs, alterations, drills or prescribed testing.

Exception: When approved by the *fire code official*.

[S][A] 108.6 Overcrowding. Overcrowding or admittance of any person beyond the *approved* capacity of a building or a portion thereof ~~((shall not be allowed))~~ is prohibited. The *fire code official*, on finding any overcrowding conditions or obstructions in aisles, passageways or other *means of egress*, or on finding any condition that constitutes a life safety hazard, ~~((shall be))~~ is authorized to direct actions be taken to reduce the overcrowding or to cause the event to be stopped until such condition or obstruction is corrected.

[S] SECTION 109 ((BOARD OF)) APPEALS

109 Point of Information

For information on appeals procedures, see Seattle Fire Department Information Bulletin *Requesting a Review by the Seattle Fire Code Appeals Board* at:
<http://www.seattle.gov/Documents/Departments/Fire/Business/5972CAM%20FireCodeAppeals.pdf>.

[S] 109.1 Appeals. Appeals from decisions or actions pertaining to the application and interpretation of this Code, except for enforcement actions pursuant to Sections 110.3, 110.4, and 112, shall first be addressed to the *fire code official*. If not resolved with the *fire code official*, the appellant may submit a written request to the *fire code official* for a review by the Fire Code Appeals Board in accordance with Appendix A, all applicable by-laws, rules, regulations, and ordinances. The result of this review is advisory only, in accordance with Seattle Municipal Code Section 3.16.300. Following receipt of the Fire Code

Appeals Board recommendation the fire chief, who shall not have acted as the *fire code official* in the first appeal of the application or interpretation of the code, shall issue a final written decision.

~~[S] (([A] 109.1 Board of appeals established. In order to hear and decide appeals of orders, decisions or determinations made by the *fire code official* relative to the application and interpretation of this code, there shall be and is hereby created a board of appeals. The board of appeals shall be appointed by the governing body and shall hold office at its pleasure. The *fire code official* shall be an ex-officio member of said board but shall not have a vote on any matter before the board. The board shall adopt rules of procedure for conducting its business, and shall render all decisions and findings in writing to the appellant with a duplicate copy to the *fire code official*.~~

~~[A] 109.2 Limitations on authority. An application for appeal shall be based on a claim that the intent of this code or the rules legally adopted hereunder have been incorrectly interpreted, the provisions of this code do not fully apply, or an equivalent method of protection or safety is proposed. The board shall not have authority to waive requirements of this code.~~

~~[A] 109.3 Qualifications. The board of appeals shall consist of members who are qualified by experience and training to pass on matters pertaining to hazards of fire, explosions, hazardous conditions or *fire protection systems*, and are not employees of the jurisdiction.)~~

SECTION 110 VIOLATIONS

~~[S][A] 110.1 Unlawful acts. It shall be unlawful for a person, firm or corporation to erect, construct, alter, repair, remove, demolish or utilize a building, occupancy, premises or system regulated by this code, or cause same to be done, in conflict with or in violation of any of the provisions of this code. It is a violation of the *Seattle Fire Code* for any person to fail to comply with the *Seattle Fire Code* or with any order issued by the *fire code official*.~~

~~[S][A] 110.2 Owner/occupant responsibility. Correction and abatement of violations of this code shall be the responsibility of the owner or the owner's authorized agent. ((Where)) If an occupant, operator, or other *person* creates, or allows to be created, hazardous conditions in violation of this code, the occupant, operator, or other *person* ((shall)) may be held responsible for the abatement of such hazardous conditions.~~

~~[S][A] 110.3 ((Notice of violation)) Order to comply. Where the *fire code official* finds a building, premises, vehicle, *vessel*, storage facility or outdoor area that is in violation of this code, the *fire code official* is authorized to ((prepare)) issue a written ((notice of violation)) order to comply describing the ((conditions deemed unsafe)) violation and, ((where)) when immediate compliance is not ((immediate)) required, specifying a time for ((reinspection)) achieving compliance. Nothing in this subsection 110.3 shall be deemed to limit or preclude any other enforcement action or proceeding, and nothing in this Section 110 shall be deemed to obligate or require the *fire code official* to issue an order to comply prior to the imposition of civil or criminal penalties or remedies.~~

~~[S][A] 110.3.1 Service. ((A notice of violation)) An order to comply issued pursuant to this code shall be served on the owner, the owner's authorized agent, operator, occupant or other person(s) responsible for the condition or violation, either by personal service ((, mail or by delivering the same to, and leaving it with, some person of responsibility on the premises)) or by first-class mail. For unattended or abandoned locations, a copy of such ((notice of violation shall)) order to comply may be posted on the premises in a conspicuous place at or near the entrance to such premises and the ((notice of violation)) order to comply shall be mailed by ((certified mail with return receipt requested or a certificate of mailing,)) first-class mail to the last known address of the owner, ((the)) owner's authorized agent, ((or)) occupant, or any other person(s) responsible for the condition or violation. Service by mail shall be deemed served on the third day following the day upon which the order was placed in the mail, unless the third day falls on a Saturday, Sunday, or legal holiday, in which event the order shall be deemed received on the next day which is not a Saturday, Sunday, or legal holiday.~~

~~[S] 110.3.1.1 Amending orders to comply. An order to comply may be amended at any time to correct clerical errors, correct other errors, or cite additional authority for a stated violation, provided such amendments do not prejudice substantial rights.~~

~~[S][A] 110.3.2 Compliance with orders ((and notices)) to comply. ((A notice of violation)) An order to comply issued or served as provided by this code shall be complied with by the owner, ((the)) owner's authorized agent, operator, occupant or other person(s) responsible for the condition or violation to which the ((notice of violation)) order to comply pertains.~~

~~[S][A] 110.3.3 Prosecution of violations. If the ((notice of violation)) order to comply is not complied with ((promptly)) by the time specified in the order, the *fire code official* is authorized to request the legal counsel of the jurisdiction to institute the appropriate legal proceedings at law or in equity to restrain, correct or abate such violation, ((or)) to require removal or termination of the unlawful occupancy of the structure in violation of the provisions of this code or of the order, or ((direction made pursuant hereto)) to collect a penalty for violation.~~

~~[A] 110.3.4 Unauthorized tampering. Signs, tags or seals posted or affixed by the *fire code official* shall not be mutilated, destroyed or tampered with, or removed, without authorization from the *fire code official*.~~

SCOPE AND ADMINISTRATION

[S] 110.3.5 Review by the fire code official. Any person aggrieved by an order to comply issued by the fire code official pursuant to this subsection 110.3 may obtain a review of the order by requesting such review in writing within ten days after service of the order. When the last day of the period so computed is a Saturday, Sunday, or legal holiday, the period shall run until 5 p.m. on the next business day. The request shall be in writing, and within 30 days of the request the aggrieved person shall submit any additional information to be considered for the review. Before the deadline for submission of information, any person aggrieved by or interested in the order to comply (including any persons served the order to comply and the complainant) may submit any additional information in the form of written material to the fire code official for consideration as part of the review.

[S] 110.3.5.1 Representative review. A review may be made by a representative of the fire code official who is familiar with the case and the applicable ordinances. The fire code official's representative will review all additional information received by the deadline for submission of information. The reviewer may also request clarification of information received and a site visit.

[S] 110.3.5.2 Decision. After review of the additional information, the fire code official may sustain the order to comply, withdraw the order to comply, continue the review to a date certain for receipt of additional information, or modify the order to comply, which may include an extension of the compliance date.

[S] 110.3.5.3 Final order. The fire code official shall issue a final order containing the decision of the fire code official and shall cause the same to be mailed by first-class mail to the person(s) named on the order to comply. The fire code official may file the final order with the King County Recorder's Office.

[S] 110.3.5.4 Extension of compliance date. The fire code official may grant an extension of time for compliance with any order, whether pending or final, upon the fire code official's finding that substantial progress toward compliance has been made and that the public will not be adversely affected by the extension. An extension of time may be revoked by the fire code official if it is shown that the conditions at the time the extension was granted have changed, the fire code official determines that a party is not performing corrective actions as agreed, or if the extension creates an adverse effect on the public. The date of revocation shall then be considered the compliance date.

[S] 110.3.6 Penalties. Penalties shall be in accordance with this section.

[S][A] ((110.4)) 110.3.6.1 ((Violation)) Civil penalties. ((Persons)) Any person who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter, repair or do work in violation of the approved construction documents or directive of the fire code official, or of a permit or certificate used under provisions of this code, shall be ((guilty of a {SPECIFY OFFENSE}, punishable by a fine of not more than {AMOUNT} dollars or by imprisonment not exceeding {NUMBER OF DAYS}, or both such fine and imprisonment)) subject to a cumulative civil penalty in an amount not to exceed \$1,000 per day for each violation from the time the violation occurs or begins until compliance is achieved. ((Each day that a violation continues after due notice has been served shall be deemed a separate offense.)) The penalty shall be collected by civil action brought in the name of the City. The fire code official shall notify the City Attorney in writing of the name of any person, firm, or corporation subject to the penalty, and the City Attorney shall, with the assistance of the fire code official, take appropriate action to collect the penalty. In any civil action for a penalty, the City has the burden of proving by a preponderance of the evidence that a violation exists or existed.

[S] 110.3.6.2 Alternative criminal penalty. Any person who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter, repair or do work in violation of the approved construction documents or directive of the fire code official, or of a permit or certificate used under provisions of this code, shall be guilty of a gross misdemeanor subject to the provisions of Seattle Municipal Code Chapters 12A.02 and 12A.04, except that absolute liability shall be imposed for such a violation or failure to comply and none of the mental states described in Section 12A.04.030 need be proved. The fire code official may request the City Attorney prosecute such violations criminally as an alternative to the civil penalties provision. Each day that a violation continues shall be deemed a separate offense.

[S][A] ((110.4.4)) 110.3.6.3 Abatement of violation. In addition to the imposition of ((the)) civil and criminal penalties, ((herein described,)) the fire code official is authorized to institute appropriate action to prevent unlawful construction; ((or)) to restrain, correct or abate a violation; ((or)) to prevent illegal occupancy of a structure or premises; or to stop an illegal act, conduct of business or occupancy of a structure on or about any premises.

[S] 110.4 Citations. Violations or failure to comply with any of the following provisions of this code may be enforced under the citation or criminal provisions set forth in this Section 110.4:

1. Overcrowding or admittance of any person beyond the approved capacity of a building, room, or space – Section 108.6.
2. Reliability of the means of egress – Section 1031.2.
3. Removal of or tampering with equipment – Section 901.8.
4. Unsafe conditions that involve illegal or improper occupancy or inadequate maintenance, or that are otherwise dangerous to human life or public welfare – Section 111.1.1.
5. Failure to comply with a stop use or work order – Section 112.

6. Inspection, testing, and maintenance of fire protection systems and radio enhancement systems – Section 510.6, Section 901.6, and Administrative Rule 9.02.
7. Failure to file reports of the test for the inspection, testing, and maintenance of fire protection systems and radio enhancement systems within the required timeframes – Section 510.6, Section 901.6, and Administrative Rule 9.02.
8. Preventable fire alarms – Section 901.12.

Any enforcement action or proceeding pursuant to this Section 110.4 shall not affect, limit, or preclude any previous, pending, or subsequent enforcement action or proceeding taken pursuant to Section 110.3.

[S] 110.4.1 Documentation. If after investigation the fire code official determines that the standards or requirements of provisions referenced in Section 110.4 have been violated, the fire code official may issue a citation to the owner and/or other person(s) responsible for the violation. The citation shall include the following information: (1) the name and address of the person to whom the citation is issued; (2) a reasonable description of the location of the property on which the violation occurred; (3) a separate statement of each standard or requirement violated; (4) the date of the violation; (5) a statement that the person cited must respond to the citation within 15 days after service; (6) a space for entry of the applicable penalty; (7) a statement that a response must be sent to the Hearing Examiner and received not later than 5 p.m. on the day the response is due; (8) the name, address, and phone number of the Office of the Hearing Examiner where the citation is to be filed; (9) a statement that the citation represents a determination that a violation has been committed by the person(s) named in the citation and that the determination shall be final unless contested as provided in this Section 110.4; and (10) a certified statement of the fire code official's representative issuing the citation, authorized by RCW 9A.72.085, setting forth facts supporting issuance of the citation.

[S] 110.4.2 Service. The citation may be served by personal service in the manner set forth in RCW 4.28.080 for service of a summons or sent by first-class mail, addressed to the last known address of such person(s). Service shall be complete at the time of personal service, or if mailed, three days following the date of mailing. If a citation sent by first-class mail is returned as undeliverable, service may be made by posting the citation at a conspicuous place on the property.

[S] 110.4.3 Response to citations. A person must respond to a citation in one of the following ways:

1. Paying the amount of the monetary penalty specified in the citation, in which case the record shall show a finding that the person cited committed or is responsible for the violation; or
2. Requesting in writing a mitigation hearing to explain the circumstances surrounding the commission of the violation and to request a reduction of the penalty, and providing an address to which notice of such hearing may be sent. A mitigation hearing cannot occur unless the violation is cured and compliance has been confirmed by the fire code official prior to the hearing; or
3. Requesting a contested hearing in writing specifying the reason why the cited violation did not occur or why the person cited is not responsible for the violation, and providing an address to which notice of such hearing may be sent.

A response to a citation must be received by the Office of the Hearing Examiner no later than 15 days after the date the citation is served. When the last day of the appeal period so computed is a Saturday, Sunday, or federal or City holiday, the period shall run until 5 p.m. on the next business day. Parties may withdraw an appeal if they no longer wish to request a mitigation hearing or a contested hearing, in which case parties must pay the amount of the monetary penalty specified in the citation and the record shall show a finding that the person committed the violation. The fire code official may withdraw the citation, in which case it is dismissed and no penalty is due.

[S] 110.4.4 Failure to respond. If a person fails to respond to a citation within 15 days of service, an order shall be entered by the Hearing Examiner finding that the person committed the violation.

[S] 110.4.5 Mitigation hearings. Mitigation hearings shall comply with Sections 110.4.5.1 through 110.4.5.5.

[S] 110.4.5.1 Date and notice. If a person requests a mitigation hearing, the mitigation hearing shall be held within 30 days after written response to the citation requesting a hearing is received by the Hearing Examiner. Notice of the time, place, and date of the hearing shall be sent to the address specified in the request for hearing not less than ten days before the date of the hearing.

[S] 110.4.5.2 Violations cured before the hearing. Prior to a mitigation hearing, all violations noted in the citation shall be corrected and compliance with provisions of this code shall be verified by the fire code official.

[S] 110.4.5.3 Procedure at hearing. The Hearing Examiner shall hold any information that shall not be governed by the Rules of Evidence. The Hearing Examiner shall review the citation and supporting report and documents if those documents are filed by the Fire Department. The person cited may present witnesses, but witnesses shall not be compelled to attend. A representative from the Seattle Fire Department may also be present and may present additional information, but attendance by a representative from the Seattle Fire Department is not required.

[S] 110.4.5.4 Disposition. The Hearing Examiner shall determine whether the person's explanation justifies reduction of the monetary penalty. Factors that may be considered include:

SCOPE AND ADMINISTRATION

1. Conditions caused by third parties – the violation was caused by the act, neglect, or abuse of a third party who is not the owner, responsible party, or part of a tenant/landlord agreement with respect to the building address in the violation;
2. Mitigating circumstances outside of the responsible party's control – the responsible party has initiated a good faith effort to resolve the violation timely, however, due to circumstances outside of the responsible party's control, the violation has not been corrected on the compliance time established by the fire code official; and
3. For penalties in subsection 110.4.8.3, no penalty shall be assessed if any individual who was on or near the premises, or who had viewed a video communication from the premises, called for the dispatch and confirmed a need for Fire Department response.

[S] 110.4.5.5 Entry of order. After hearing the explanation of the *person* cited and any other information presented at the hearing, the Hearing Examiner shall enter an order finding that the *person* cited committed the violation and assessing a monetary penalty in an amount determined pursuant to Section 110.4.8. The Hearing Examiner's decision is the final decision of the City on the matter.

[S] 110.4.6 Contested hearings. Contested hearings shall comply with Sections 110.4.6.1 through 110.4.6.7.

[S] 110.4.6.1 Date and notice. If a *person* requests a contested hearing, the hearing shall be held within 60 days after receipt of the hearing request.

[S] 110.4.6.2 Hearing. Contested hearings shall be conducted pursuant to the procedures for hearing contested cases contained in Seattle Municipal Code Section 3.02.090 and the rules adopted by the Hearing Examiner for hearing contested cases, except as modified by this section. The issues heard at the hearing shall be limited to those that are raised in writing in the response to the citation and that are within the jurisdiction of the Hearing Examiner. The Hearing Examiner may issue subpoenas for the attendance of witnesses and the production of documents.

[S] 110.4.6.3 Sufficiency. No citation shall be deemed insufficient for failure to contain a detailed statement of the facts constituting the specific violation which the *person* cited is alleged to have committed or by reason of defects or imperfections, provided such lack of detail or such defects or imperfections do not prejudice substantial rights of the *person* cited.

[S] 110.4.6.4 Amendment of citation. A citation may be amended prior to the conclusion of the hearing to conform to the evidence presented if substantial rights of the *person* cited are not thereby prejudiced.

[S] 110.4.6.5 Evidence at hearing. The certified statement or declaration authorized by RCW 9A.72.085 shall be prima facie evidence that a violation occurred and that the *person* cited is responsible. The certified statement or declaration authorized under RCW 9A.72.085 and any other evidence accompanying the report shall be admissible without further evidentiary foundation. Any certifications or declarations authorized under RCW 9A.72.085 shall also be admissible without further evidentiary foundation. The *person* cited may rebut the Seattle Fire Department's evidence and establish that the cited violation(s) did not occur or that the *person* contesting the citation is not responsible for the violation.

[S] 110.4.6.6 Disposition. If the citation is sustained at the hearing, the Hearing Examiner shall enter an order finding that the *person* cited committed the violation and impose the applicable penalty. The Hearing Examiner may reduce the monetary penalty in accordance with the mitigation provisions in Section 110.4.5. If the Hearing Examiner determines that the violation did not occur, the Hearing Examiner shall enter an order dismissing the citation.

[S] 110.4.6.7 Final decision. The Hearing Examiner's decision is the final decision of the City.

[S] 110.4.7 Failure to appear for hearing. Failure to appear for a requested hearing will result in an order being entered finding that the *person* cited committed the violation stated in the citation and assessing the penalty specified in the citation. For good cause shown and upon terms the Hearing Examiner deems just, the Hearing Examiner may set aside an order entered upon a failure to appear.

[S] 110.4.8 Penalties. Penalties shall be in accordance with Sections 110.4.8.1 through 110.4.8.3.

[S] 110.4.8.1 The first time that a *person(s)* is found to have violated one of the provisions referenced in Section 110.4, except subsection 110.4(8), the *person(s)* shall be subject to a penalty of \$373.

[S] 110.4.8.2 The second time, and any subsequent times, that a *person(s)* is found to have violated one of the provisions referenced in Section 110.4, except subsection 110.4(8), within a 12 month period, the *person(s)* shall be subject to a penalty of \$746 for each such violation.

[S] 110.4.8.3 The *person(s)* found to have violated provisions referenced in subsection 110.4(8) shall be subject to the following penalties:

1. No penalty for the first violation within a quarter of a calendar year.
2. Three hundred seventy-three dollars if at least two but fewer than six violations have occurred in the same quarter of a calendar year.
3. Seven hundred forty-six dollars if at least six but fewer than nine violations have occurred in the same quarter of a calendar year.

4. Nine hundred dollars if at least nine violations have occurred in the same quarter of a calendar year.

[S] 110.4.8.4 Alternative criminal penalty. Any person who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter, repair, or do work in violation of the approved construction documents or directive of the fire code official, or of a permit or certificate used under provisions of this code, shall be guilty of a gross misdemeanor subject to the provisions of Seattle Municipal Code Chapters 12A.02 and 12A.04, except that absolute liability shall be imposed for such a violation or failure to comply and none of the mental states described in Section 12A.04.030 need be proved. The fire code official may request the City Attorney prosecute such violations criminally as an alternative to the civil penalties provision. Each day that a violation continues shall be deemed a separate offense.

[S] 110.4.8.5 Abatement of violation. In addition to the imposition of civil and criminal penalties, the fire code official is authorized to institute appropriate action to prevent unlawful construction; to restrain, correct, or abate a violation; to prevent illegal occupancy of a structure or premises; or to stop an illegal act, conduct of business, or occupancy of a structure on or about any premises.

[S] 110.4.9 Collection of penalties. If the person or entity cited fails to pay a penalty imposed pursuant to this Section 110.4, the penalty may be referred to a collection agency. The cost to the City for the collection services will be assessed as costs, at the rate agreed to between the City and the collection agency and added to the penalty. Alternatively, the City may pursue collection in any manner allowed by law.

[S] 110.4.10 Each day a separate violation. Each day a person or entity violates or fails to comply with a provision referenced in Section 110.4 may be considered a separate violation for which a citation may be issued.

[S] 110.4.11 Additional relief. The fire code official may seek legal or equitable relief at any time to enjoin any acts or practices that violate provisions referenced in Section 110.4 or abate any condition that constitutes a nuisance, and those costs may be added to the penalty.

[S] SECTION 111

UNSAFE BUILDINGS, PREMISES, VEHICLES, AND VESSELS

[S][A] 111.1 General. If ((during the inspection of)) a premises, a building or structure, or any building system, vehicle or vessel, in whole or in part, ((constitutes a clear and imminent threat to human life, safety or health)) endangers any property or the health or safety of the occupants of the property or of neighboring premises, buildings, motor vehicles, vessels, or the health and safety of the public or fire department personnel, the fire code official shall issue such notice or orders to remove or remedy the conditions as shall be deemed necessary in accordance with this section. ((-and shall)) The fire code official may refer the building to the ((building department)) Seattle Department of Construction and Inspections for any repairs, alterations, remodeling, removing or demolition required.

[S][A] 111.1.1 Unsafe conditions. Structures, premises, or existing equipment that are or hereafter become unsafe or deficient because of inadequate means of egress, that constitute a fire hazard, ((are otherwise dangerous to human life or the public welfare, or)) that involve illegal or improper occupancy or inadequate maintenance, or that are otherwise dangerous to human life or public welfare, shall be deemed an unsafe condition. A vacant structure that is not secured against unauthorized entry as required by Section 311 shall be deemed unsafe.

[S][A] 111.1.2 Structural hazards. Where an apparent structural hazard is caused by the faulty installation, operation or malfunction of any of the items or devices governed by this code, the fire code official ((shall)) is authorized to immediately notify the building code official in accordance with Section ((410.4)) 111.1.

[S][A] 111.2 Evacuation. The fire code official or the fire department official in charge of an incident shall be authorized to order the immediate evacuation of any occupied premises, building, vehicle, or vessel deemed unsafe where such premises, building, vehicle, or vessel has hazardous conditions that present imminent danger to premises, building, vehicle, or vessel occupants. Persons so notified shall immediately leave the structure or premises, vehicle, or vessel and shall not enter or re-enter until authorized to do so by the fire code official or the fire department official in charge of the incident.

[A] 111.3 Summary abatement. Where conditions exist that are deemed hazardous to life and property, the fire code official or fire department official in charge of the incident is authorized to abate summarily such hazardous conditions that are in violation of this code.

[A] 111.4 Abatement. The owner, the owner's authorized agent, operator or occupant of a building or premises deemed unsafe by the fire code official shall abate or cause to be abated or corrected such unsafe conditions either by repair, rehabilitation, demolition or other approved corrective action.

[S] 111.5 Notification. The fire code official shall serve the responsible party with a copy of violations, correction letters, and orders issued.

SCOPE AND ADMINISTRATION

[S] SECTION 112
STOP WORK OR USE ORDER

[S][A] 112.1 Order. Where the *fire code official* finds any work or use regulated by this code being performed in a manner contrary to the provisions of this code, or in a dangerous or unsafe manner, the *fire code official* is authorized to issue a stop work or use order.

[S][A] 112.2 Issuance. A stop work or use order shall be in writing and shall be given to the *owner* of the property, or to the *owner's* authorized agent, or to the person doing the work or use. Upon issuance of a stop work or use order, the cited work or use shall immediately cease. The stop work or use order shall state the reason for the order, and the conditions under which the cited work or use is authorized to resume.

[S][A] 112.3 Emergencies. Where an emergency exists, the *fire code official* shall not be required to give a written notice prior to stopping the work or use.

[S][A] 112.4 Failure to comply. ~~((Any))~~ It is a violation of this code for any person ~~((who shall))~~ to continue any work or use after having been served with a stop work or use order, except such work or use as that *person* is directed to perform to remove a violation or unsafe condition. ~~((shall be liable to a fine of not less than {AMOUNT} dollars or more than {AMOUNT} dollars.))~~

SECTION 113
SERVICE UTILITIES

[A] 113.1 Authority to disconnect service utilities. The *fire code official* shall have the authority to authorize disconnection of utility service to the building, structure or system in order to safely execute emergency operations or to eliminate an immediate hazard. The *fire code official* shall notify the serving utility and, where possible, the *owner* or the *owner's* authorized agent and the occupant of the building, structure or service system of the decision to disconnect prior to taking such action. If not notified prior to disconnection, then the *owner*, the *owner's* authorized agent or occupant of the building, structure or service system shall be notified in writing as soon as practical thereafter.

Part III—Building and Equipment Design Features

CHAPTER 5 FIRE SERVICE FEATURES

User note:

About this chapter: Chapter 5 provides requirements that apply to all buildings and occupancies and pertain to access roads, access to building openings and roofs, premises identification, key boxes, fire protection water supplies, fire command centers, fire department access to equipment and emergency responder radio coverage in buildings. Although many safety features are part of the building design, features such as proper fire department access roads and radio coverage are necessary in case of emergency and are important tools for emergency responders for public safety and their own safety.

SECTION 501 GENERAL

501.1 Scope. Fire service features for buildings, structures and premises shall comply with this chapter.

501.2 Permits. A permit shall be required as set forth in Sections 105.6 and 105.7.

501.3 Construction documents. *Construction documents* for proposed fire apparatus access, location of *fire lanes*, security gates across fire apparatus access roads and *construction documents* and hydraulic calculations for fire hydrant systems shall be submitted to the fire department for review and approval prior to construction.

501.4 Timing of installation. Where fire apparatus access roads or a water supply for fire protection are required to be installed, such protection shall be installed and made serviceable prior to and during the time of construction except where *approved* alternative methods of protection are provided. Temporary street signs shall be installed at each street intersection where construction of new roadways allows passage by vehicles in accordance with Section 505.2.

SECTION 502 DEFINITIONS

502.1 Definitions. The following terms are defined in Chapter 2:

AGENCY.

FIRE APPARATUS ACCESS ROAD.

FIRE COMMAND CENTER.

FIRE DEPARTMENT MASTER KEY.

FIRE LANE.

KEY BOX.

TRAFFIC CALMING DEVICES.

SECTION 503 FIRE APPARATUS ACCESS ROADS

[S] 503.1 Where required. Fire apparatus access roads shall be provided and maintained in accordance with Sections 503.1.1 through 503.1.3 and Appendix D as amended.

[S] 503.1.1 Buildings and facilities. *Approved* fire apparatus access roads shall be provided for every facility, building or portion of a building hereafter constructed or moved into or within the jurisdiction. The fire apparatus access road shall comply with the requirements of this section and shall extend to within 150 feet (45 720 mm) of all portions of the facility and all portions of the *exterior walls* of the first story of the building as measured by an *approved* route around the exterior of the building or facility.

FIRE SERVICE FEATURES

Exceptions:

1. The *fire code official* is authorized to increase the dimension ~~((of 150 feet (45 720 mm)))~~ where any of the following conditions occur:
 - 1.1. The distance may be increased to 375 feet when the building is equipped throughout with an *approved automatic sprinkler system* installed in accordance with Section 903.3.1.1 ~~((;))~~ or 903.3.1.2. ~~((or 903.3.1.3.))~~ The distance may be increased to 500 feet for one- or two-family dwellings when the building is equipped with an approved automatic sprinkler system installed in accordance with Section 903.3.1.3.
 - 1.2. Fire apparatus access roads cannot be installed because of location on property, topography, waterways, nonnegotiable grades or other similar conditions, and an *approved* alternative means of fire protection is provided.
 - 1.3. ~~((There are not more than two Group R-3 or Group U occupancies.))~~ The distance may be increased to 200 feet for not more than two one- and two-family dwellings served by an access road. The access road can serve more than two dwellings, but only two are permitted to use the 200-foot distance.
 - 1.4 Where smoke detection monitored by a central station is provided throughout school portables exceeding the 150-foot distance.
2. Where approved by the *fire code official*, fire apparatus access roads shall be permitted to be exempted or modified for solar photovoltaic power generation facilities.

503.1.2 Additional access. The *fire code official* is authorized to require more than one fire apparatus access road based on the potential for impairment of a single road by vehicle congestion, condition of terrain, climatic conditions or other factors that could limit access.

503.1.3 High-piled storage. Fire department vehicle access to buildings used for *high-piled combustible storage* shall comply with the applicable provisions of Chapter 32.

503.2 Specifications. Fire apparatus access roads shall be installed and arranged in accordance with Sections 503.2.1 through 503.2.8.

[S] 503.2.1 Dimensions. Fire apparatus access roads shall have an unobstructed width of not less than 20 feet (6096 mm), exclusive of shoulders, except for *approved* security gates in accordance with Section 503.6, and an unobstructed vertical clearance of not less than ~~((13 feet 6 inches (4115 mm)))~~ 14 feet (4267 mm).

Exceptions:

1. Access roads serving not more than two Group R-3 or U occupancies shall have an unobstructed width of not less than 12 feet.
2. Public streets shall be in accordance with the Seattle Right-of-Way Improvements Manual.

503.2.2 Authority. The *fire code official* shall have the authority to require or permit modifications to the required access widths where they are inadequate for fire or rescue operations or where necessary to meet the public safety objectives of the jurisdiction.

503.2.3 Surface. Fire apparatus access roads shall be designed and maintained to support the imposed loads of fire apparatus and shall be surfaced so as to provide all-weather driving capabilities.

[S] 503.2.4 Turning radius. The required turning radius of a fire apparatus access road shall be ~~((determined by the fire code official.))~~ 25 feet minimum inside curb and 50 feet minimum outside curb.

[S] 503.2.5 Dead ends. Dead-end fire apparatus access roads in excess of 150 feet (45 720 mm) in length shall be provided with ~~((an approved area for turning around fire apparatus.))~~ a turnaround in accordance with Appendix D as amended.

[S] 503.2.6 Bridges and elevated surfaces. Where a bridge or an elevated surface is part of a fire apparatus access road, the bridge shall be constructed and maintained in accordance with ~~((AASHTO HB-17))~~ the Seattle Right-of-Way Improvements Manual. Bridges and elevated surfaces shall be designed for a live load sufficient to carry the imposed loads of fire apparatus. Vehicle load limits shall be posted at both entrances to bridges where required by the *fire code official*. Where elevated surfaces designed for emergency vehicle use are adjacent to surfaces that are not designed for such use, *approved* barriers, *approved* signs or both shall be installed and maintained where required by the *fire code official*.

[S] 503.2.7 Grade. The grade of the fire apparatus access road shall be ~~((within the limits established by the fire code official based on the fire department's apparatus.))~~ in accordance with Appendix D as amended.

[S] 503.2.8 Angles of approach and departure. The angles of approach and departure for fire apparatus access roads shall be ~~((within the limits established by the fire code official based on the fire department's apparatus.))~~ in accordance with the Seattle Right-of-Way Improvements Manual.

503.3 Marking. Where required by the *fire code official*, *approved* signs or other *approved* notices or markings that include the words NO PARKING—FIRE LANE shall be provided for fire apparatus access roads to identify such roads or prohibit

the obstruction thereof. The means by which *fire lanes* are designated shall be maintained in a clean and legible condition at all times and be replaced or repaired when necessary to provide adequate visibility.

503.4 Obstruction of fire apparatus access roads. Fire apparatus access roads shall not be obstructed in any manner, including the parking of vehicles. The minimum widths and clearances established in Sections 503.2.1 and 503.2.2 shall be maintained at all times.

503.4.1 Traffic calming devices. Traffic calming devices shall be prohibited unless *approved* by the *fire code official*.

503.5 Required gates or barricades. The *fire code official* is authorized to require the installation and maintenance of gates or other *approved* barricades across fire apparatus access roads, trails or other accessways, not including public streets, alleys or highways. Electric gate operators, where provided, shall be *listed* in accordance with UL 325. Gates intended for automatic operation shall be designed, constructed and installed to comply with the requirements of ASTM F2200.

503.5.1 Secured gates and barricades. Where required, gates and barricades shall be secured in an *approved* manner. Roads, trails and other accessways that have been closed and obstructed in the manner prescribed by Section 503.5 shall not be trespassed on or used unless authorized by the *owner* and the *fire code official*.

Exception: The restriction on use shall not apply to public officers acting within the scope of duty.

503.6 Security gates. The installation of security gates across a fire apparatus access road shall be *approved* by the *fire code official*. Where security gates are installed, they shall have an *approved* means of emergency operation. The security gates and the emergency operation shall be maintained operational at all times. Electric gate operators, where provided, shall be *listed* in accordance with UL 325. Gates intended for automatic operation shall be designed, constructed and installed to comply with the requirements of ASTM F2200.

SECTION 504

ACCESS TO BUILDING OPENINGS AND ROOFS

504.1 Required access. Exterior doors and openings required by this code or the *International Building Code* shall be maintained readily accessible for emergency access by the fire department. An *approved* access walkway leading from fire apparatus access roads to exterior openings shall be provided where required by the *fire code official*.

504.2 Maintenance of exterior doors and openings. Exterior doors and their function shall not be eliminated without prior approval. Exterior doors that have been rendered nonfunctional and that retain a functional door exterior appearance shall have a sign affixed to the exterior side of the door with the words THIS DOOR BLOCKED. The sign shall consist of letters having a principal stroke of not less than 3/4 inch (19.1 mm) wide and not less than 6 inches (152 mm) high on a contrasting background. Required fire department access doors shall not be obstructed or eliminated. Exit and *exit access* doors shall comply with Chapter 10. Access doors for *high-piled combustible storage* shall comply with Section 3206.7.

504.3 Stairway access to roof. New buildings four or more stories above grade plane, except those with a roof slope greater than four units vertical in 12 units horizontal (33.3-percent slope), shall be provided with a *stairway* to the roof. *Stairway* access to the roof shall be in accordance with Section 1011.12. Such *stairway* shall be marked at street and floor levels with a sign indicating that the *stairway* continues to the roof. Where roofs are used for roof gardens or for other purposes, *stairways* shall be provided as required for such occupancy classification.

SECTION 505

PREMISES IDENTIFICATION

505.1 Address identification. New and existing buildings shall be provided with *approved* address identification. The address identification shall be legible and placed in a position that is visible from the street or road fronting the property. Address identification characters shall contrast with their background. Address numbers shall be Arabic numbers or alphabetical letters. Numbers shall not be spelled out. Each character shall be not less than 4 inches (102 mm) high with a minimum stroke width of 1/2 inch (12.7 mm). Where required by the *fire code official*, address identification shall be provided in additional *approved* locations to facilitate emergency response. Where access is by means of a private road and the building cannot be viewed from the *public way*, a monument, pole or other sign or means shall be used to identify the structure. Address identification shall be maintained.

505.2 Street or road signs. Streets and roads shall be identified with *approved* signs. Temporary signs shall be installed at each street intersection when construction of new roadways allows passage by vehicles. Signs shall be of an *approved* size, weather resistant and be maintained until replaced by permanent signs.

FIRE SERVICE FEATURES

SECTION 506
KEY BOXES**506.1 Point of Information**

The fire code official has approved the “KnoxBox” as the access key box for use in the City of Seattle. For more information see Seattle Fire Department Information Bulletin 5965, Key Boxes for Emergency Access.

[S] **506.1 Where required.** Key boxes shall be installed in accordance with this section.

[S] **506.1.1 Access key box.** Where access to or within a structure or an area is restricted because of secured openings or where immediate access is necessary for life-saving or fire-fighting purposes, the *fire code official* is authorized to require a key box to be installed in an *approved* location. The key box shall be of an *approved* type listed in accordance with UL 1037, and shall contain keys to gain necessary access as required by the *fire code official*.

[S] ~~((506.1.1 Locks. An approved lock shall be installed on gates or similar barriers where required by the fire code official.~~

506.1.2 Key boxes for nonstandardized fire service elevator keys. ~~Key boxes provided for nonstandardized fire service elevator keys shall comply with Section 506.1 and all of the following:~~

- ~~1. The key box shall be compatible with an existing rapid entry key box system in use in the jurisdiction and approved by the fire code official.~~
- ~~2. The front cover shall be permanently labeled with the words “Fire Department Use Only — Elevator Keys.”~~
- ~~3. The key box shall be mounted at each elevator bank at the lobby nearest to the lowest level of fire department access.~~
- ~~4. The key box shall be mounted 5 feet 6 inches (1676 mm) above the finished floor to the right side of the elevator bank.~~
- ~~5. Contents of the key box are limited to fire service elevator keys. Additional elevator access tools, keys and information pertinent to emergency planning or elevator access shall be permitted where authorized by the fire code official.~~
- ~~6. In buildings with two or more elevator banks, a single key box shall be permitted to be used where such elevator banks are separated by not more than 30 feet (9144 mm). Additional key boxes shall be provided for each individual elevator or elevator bank separated by more than 30 feet (9144 mm).~~

Exception: A single key box shall be permitted to be located adjacent to a *fire command center* or the non-standard fire service elevator key shall be permitted to be secured in a key box used for other purposes and located in accordance with Section 506.1.))

[S] **506.1.2. Elevator key box.** An elevator key box locked and keyed to the standard city elevator key box access key shall be provided at the designated recall floor above the Phase I recall switch or in the main lobby above the hall call button when no recall feature exists.

[S] **506.1.2.1 Elevator key box requirements.** The elevator key box shall meet the following standards:

1. Dimensions – 8 inches (203 mm) high, 6 inches (152 mm) wide and 1 inch (25 mm) deep.
2. Material – 16 gauge steel welded.
3. Color – red unless located in the main lobby above the call button, 6 feet nominal above the floor, in which case any color is approved.
4. Labeling – “FOR FIRE DEPARTMENT USE.”
5. Lock openable with factory restricted Medeco 3, level 7 key.
6. Mounting height shall be 6 feet (1829 mm) nominal above the floor.

[S] **506.1.2.2 Elevator key box contents.** Keys for access to and for the operation of elevator equipment shall be tagged, labeled, and retained in the key box. The elevator key box shall contain standard and non-standard fire emergency service keys (Phase I and II, one key for each switch) in addition to keys for all of the following:

1. Machine room door;
2. Secondary level door;
3. Pit door;
4. Roof door;
5. Independent, hospital emergency and/or attendant operation;
6. Hoistway access;
7. Mechanical hoist access devices (broken arm, lunar, etc.);
8. Miscellaneous switch keys;

9. Fire alarm panel room;
10. Sprinkler valve control room.

506.1.2.2 Point of Information

Due to security consideration, elevator key boxes should not contain master keys to tenant spaces. Keys in elevator key boxes should be limited to those for access of the building systems and equipment listed in *Seattle Fire Code, Section 506.1.2.2.*

[S] 506.1.3 Locks. An approved lock shall be installed on gates or similar barriers when required by the fire code official.

506.2 Key box maintenance. The operator of the building shall immediately notify the *fire code official* and provide the new key where a lock is changed or rekeyed. The key to such lock shall be secured in the key box.

SECTION 507 FIRE PROTECTION WATER SUPPLIES

[S] 507.1 Required water supply. An approved water supply capable of supplying the required fire flow for fire protection shall be provided to premises on which facilities, buildings or portions of buildings are hereafter constructed or moved into or within the jurisdiction, and for buildings undergoing a substantial alteration as determined by the Seattle Department of Construction and Inspections.

507.2 Type of water supply. A water supply shall consist of reservoirs, pressure tanks, elevated tanks, water mains or other fixed systems capable of providing the required fire flow.

507.2.1 Private fire service mains. Private fire service mains and appurtenances shall be installed in accordance with NFPA 24.

507.2.2 Water tanks. Water tanks for private fire protection shall be installed in accordance with NFPA 22.

[W][S] 507.3 Fire flow. Fire-flow requirements for buildings or portions of buildings and facilities shall be ~~((determined by an approved method))~~ in accordance with Appendix B.

Exceptions:

1. Fire flow is not required for structures under 500 square feet with a B, U, or R-1 occupancy where structures are at least 30 feet from any other structure and are used only for recreation.
2. In rural and suburban areas in which adequate and reliable water supply do not exist, the fire code official is authorized to utilize NFPA 1142 or the *International Wildland-Urban Interface Code*.
3. Fire flow requirements for shipyards and designated marine hot work facilities shall be in accordance with Administrative Rule 26.02.14 and any future revisions to this rule adopted by the fire code official.
4. Fire flow requirements for new and existing covered marinas shall be in accordance with Chapters 36 and 94 respectively.

507.4 Water supply test. The *fire code official* shall be notified prior to the water supply test. Water supply tests shall be witnessed by the *fire code official* or approved documentation of the test shall be provided to the *fire code official* prior to final approval of the water supply system.

507.5 Fire hydrant systems. Fire hydrant systems shall comply with Sections 507.5.1 through 507.5.6.

507.5.1 Where required. Where a portion of the facility or building hereafter constructed or moved into or within the jurisdiction is more than 400 feet (122 m) from a hydrant on a fire apparatus access road, as measured by an *approved* route around the exterior of the facility or building, on-site fire hydrants and mains shall be provided where required by the *fire code official*.

Exceptions:

1. For Group R-3 and Group U occupancies, the distance requirement shall be 600 feet (183 m).
2. For buildings equipped throughout with an *approved automatic sprinkler system* installed in accordance with Section 903.3.1.1 or 903.3.1.2, the distance requirement shall be 600 feet (183 m).

507.5.1.1 Hydrant for standpipe systems. Buildings equipped with a standpipe system installed in accordance with Section 905 shall have a fire hydrant within 100 feet (30 480 mm) of the fire department connections.

Exception: The distance shall be permitted to exceed 100 feet (30 480 mm) where *approved* by the *fire code official*.

507.5.2 Inspection, testing and maintenance. Fire hydrant systems shall be subject to periodic tests as required by the *fire code official*. Fire hydrant systems shall be maintained in an operative condition at all times and shall be repaired where defective. Additions, repairs, *alterations* and servicing shall comply with *approved* standards. Records of tests and required maintenance shall be maintained.

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507.5.3 Private fire service mains and water tanks. Private fire service mains and water tanks shall be periodically inspected, tested and maintained in accordance with NFPA 25 at the following intervals:

1. Private fire hydrants of all types: Inspection annually and after each operation; flow test and maintenance annually.
2. Fire service main piping: Inspection of exposed, annually; flow test every 5 years.
3. Fire service main piping strainers: Inspection and maintenance after each use.

Records of inspections, testing and maintenance shall be maintained.

507.5.4 Obstruction. Unobstructed access to fire hydrants shall be maintained at all times. The fire department shall not be deterred or hindered from gaining immediate access to fire protection equipment or fire hydrants.

507.5.5 Clear space around hydrants. A 3-foot (914 mm) clear space shall be maintained around the circumference of fire hydrants, except as otherwise required or *approved*.

[S] 507.5.6 Physical protection. Where fire hydrants are subject to impact by a motor vehicle, guard posts or other *approved* means shall comply with Section 312. Any horizontal, lateral, or diagonal elements that are a part of the protection for a fire hydrant shall not interfere with the ability to freely access and safely operate the hydrant.

SECTION 508 FIRE COMMAND CENTER

508.1 General. Where required by other sections of this code and in all buildings classified as high-rise buildings by the *International Building Code*, a *fire command center* for fire department operations shall be provided and shall comply with Sections 508.1.1 through 508.1.6.

508.1.1 Location and access. The location and accessibility of the *fire command center* shall be *approved* by the *fire code official*.

[W][S] 508.1.2 Separation. The *fire command center* shall be separated from the remainder of the building by not less than a ((+)) 2-hour *fire barrier* constructed in accordance with Section 707 of the *International Building Code* or *horizontal assembly* constructed in accordance with Section 711 of the *International Building Code*, or both.

[S] 508.1.3 Size. The *fire command center* shall be not less than ((0.015 percent of the total building area of the facility served or)) 200 square feet (19 m²) in area, ((which ever is greater,)) with a minimum dimension of ((0.7 times the square root of the room area or)) 10 feet (3048 mm). ~~((, whichever is greater.))~~

508.1.4 Layout approval. A layout of the *fire command center* and all features required by this section to be contained therein shall be submitted for approval prior to installation.

508.1.5 Storage. Storage unrelated to operation of the *fire command center* shall be prohibited.

[S] 508.1.6 Required features. The *fire command center* shall comply with NFPA 72 and shall contain the following features:

1. The emergency voice/alarm communication system control unit.
2. The fire department communications system.
3. Fire detection and alarm system annunciator.
4. Annunciator unit visually indicating the location of the elevators and whether they are operational.
5. Status indicators and controls for air distribution systems.
6. The fire fighter's control panel required by Section 909.16 for smoke control systems installed in the building.
7. Controls for unlocking *interior exit stairway* doors simultaneously.
8. Sprinkler valve and water-flow detector display panels.
9. Emergency and standby power status indicators.
10. A telephone for fire department use with controlled access to the public telephone system.
11. Fire pump status indicators.
12. Schematic building plans indicating the typical floor plan and detailing the building core, *means of egress, fire protection systems*, fire-fighter air-replenishment systems, fire-fighting equipment and fire department access, and the location of *fire walls, fire barriers, fire partitions, smoke barriers* and smoke partitions.
13. An *approved* Building Information Card that includes, but is not limited to, all of the following information:
 - 13.1. General building information that includes: property name, address, the number of floors in the building above and below grade, use and occupancy classification (for mixed uses, identify the different types of occupancies on each floor) and the estimated building population during the day, night and weekend;

FIRE SERVICE FEATURES

- 13.2. Building emergency contact information that includes: a list of the building's emergency contacts including but not limited to building manager, building engineer and their respective work phone number, cell phone number and e-mail address;
- 13.3. Building construction information that includes: the type of building construction including but not limited to floors, walls, columns and roof assembly;
- 13.4. *Exit access stairway* and *exit stairway* information that includes: number of *exit access stairways* and *exit stairways* in building; each *exit access stairway* and *exit stairway* designation and floors served; location where each *exit access stairway* and *exit stairway* discharges, *interior exit stairways* that are pressurized; *exit stairways* provided with emergency lighting; each *exit stairway* that allows reentry; *exit stairways* providing roof access; elevator information that includes: number of elevator banks, elevator bank designation, elevator car numbers and respective floors that they serve; location of elevator machine rooms, control rooms and control spaces; location of sky lobby; and location of freight elevator banks;
- 13.5. Building services and system information that includes: location of mechanical rooms, location of building management system, location and capacity of all fuel oil tanks, location of emergency generator and location of natural gas service;
- 13.6. *Fire protection system* information that includes: location of standpipes, location of fire pump room, location of fire department connections, floors protected by automatic sprinklers and location of different types of *automatic sprinkler systems* installed including but not limited to dry, wet and pre-action;
- 13.7. Hazardous material information that includes: location and quantity of hazardous material.
14. Work table.
15. Generator supervision devices, manual start and ~~((transfer))~~ stop features.
16. Public address system, where specifically required by other sections of this code.
17. Elevator fire recall switch in accordance with ASME A17.1/CSA B44.
18. Elevator emergency or standby power selector switch(es), where emergency or legally required standby power is provided.
19. On-site fire protection water tank fill valve control switch, tank level indicators, tank low level alarm, and tank fill signal.

SECTION 509

FIRE PROTECTION AND UTILITY EQUIPMENT IDENTIFICATION AND ACCESS

509.1 Identification. Fire protection equipment shall be identified in an *approved* manner. Rooms containing controls for air-conditioning systems, sprinkler risers and valves, or other fire detection, suppression or control elements shall be identified for the use of the fire department. *Approved* signs required to identify fire protection equipment and equipment location shall be constructed of durable materials, permanently installed and readily visible.

509.1.1 Utility identification. Where required by the *fire code official*, gas shutoff valves, electric meters, service switches and other utility equipment shall be clearly and legibly marked to identify the unit or space that it serves. Identification shall be made in an *approved* manner, readily visible and shall be maintained.

509.2 Equipment access. *Approved* access shall be provided and maintained for all fire protection equipment to permit immediate safe operation and maintenance of such equipment. Storage, trash and other materials or objects shall not be placed or kept in such a manner that would prevent such equipment from being readily accessible.

SECTION 510

EMERGENCY RESPONDER RADIO COVERAGE

[S] 510.1 Emergency responder radio coverage in new buildings. ~~((New buildings shall have approved))~~ *Approved* radio coverage for emergency responders shall be provided within ~~((the))~~ buildings ~~((based on the existing coverage levels of the public safety communication systems utilized by the jurisdiction, measured at the exterior of the building-))~~ meeting any of the following conditions:

1. High rise buildings;
2. The total building area is 50,000 square feet or more;
3. The total basement area is 10,000 square feet or more; or
4. There are floors used for human occupancy more than 30 feet below the finished floor of the lowest level of exit discharge.

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The radio coverage system shall be installed in accordance with Sections 510.4 through 510.5.5 of this code and the provisions of NFPA 1221 (2019), Standard for the Installation, Maintenance and Use of Emergency Services Communications Systems. This section shall not require improvement of the existing public safety communication systems.

Exceptions:

- ((1. Where ~~approved by the building official and the fire code official~~, a wired communication system in accordance with Section 907.2.12.2 shall be permitted to be installed or maintained instead of an ~~approved~~ radio coverage system.
2. ~~Where it is determined by the fire code official that the radio coverage system is not needed.~~))
1. Buildings and areas of buildings that have minimum radio coverage signal strength levels of the King County Regional 800 MHz Radio System within the building in accordance with Section 510.4.1 without the use of a radio coverage system.
 2. In facilities where emergency responder radio coverage is required and such systems, components or equipment required could have a negative impact on the normal operations of that facility, the *fire code official* shall have the authority to accept an automatically activated emergency responder radio coverage system.
 3. One- and two-family dwellings and townhouses.

510.2 Emergency responder radio coverage in existing buildings. Existing buildings shall be provided with *approved* radio coverage for emergency responders as required in Chapter 11.

510.3 Permit required. A construction permit for the installation of or modification to emergency responder radio coverage systems and related equipment is required as specified in Section 105.7.6. Maintenance performed in accordance with this code is not considered a modification and does not require a permit.

Point of Information

Prior coordination and approval from the Public Safety Radio System Operator is required before installation of an Emergency Responder Radio System. Until 2022, such approval is required from Seattle. In 2022 PSERN will be the single operator of a county wide system. In order to be forward compatible, designers and contractors should be aware of PSERN's requirements for Distributed Antenna Systems which can be found via www.psern.org/requirements.

[W][S] 510.4 Technical requirements. Systems, components, and equipment required to provide the emergency responder radio coverage systems shall comply with Sections 510.4.1 through 510.4.2.8.

[S] 510.4.1 Emergency responder communication enhancement system signal strength. The building shall be considered to have acceptable emergency responder communications enhancement system coverage when signal strength measurements in ((95)) 90 percent of all areas on each floor of the building meet the signal strength requirements in Sections 510.4.1.1 through 510.4.1.3.

[W][S] 510.4.1.1 Minimum signal strength into the building. The minimum inbound signal strength shall be sufficient to provide usable voice communications throughout the coverage area as specified by the *fire code official*. The inbound signal level shall be a minimum of -95 dBm in 95 percent of the coverage area and 99 percent in critical areas and sufficient to provide not less than a Delivered Audio Quality (DAQ) of 3.0 or an equivalent Signal-to-Interference-Plus-Noise Ratio (SINR) applicable to the technology for either analog or digital signals.

[S] 510.4.1.2 Minimum signal strength out of the building. The minimum outbound signal strength shall be sufficient to provide usable voice communications throughout the coverage area as specified by the *fire code official*. The outbound signal level shall be sufficient to provide not less than a DAQ of 3.0 or an equivalent SINR applicable to the technology for either analog or digital signals.

Exception: Critical areas, such as the *fire command center(s)*, the fire pump room(s), *interior exit stairways*, *exit passageways*, elevator lobbies, standpipe cabinets, sprinkler sectional valve locations, and other areas required by the *fire code official*, shall be provided with 99 percent floor area radio coverage.

[S] 510.4.1.3 System performance. Signal strength shall be sufficient to meet the requirements of the applications being utilized by public safety for emergency operations through the coverage area as specified by the ((*fire code official*)) Public Safety Radio System Operator in Section 510.4.2.2.

Point of Information

When determining if the minimum signal strength referenced in Section 510.4.1.1 exists at a subject building, the signal strength shall be measured at any point on the exterior of the building up to the highest point on the roof.

[S] 510.4.2 System design. The emergency responder radio coverage system shall be designed in accordance with Sections 510.4.2.1 through 510.4.2.8 and NFPA 1221 (2019).

[S] 510.4.2.1 Amplification systems and components. Buildings and structures that cannot support the required level of radio coverage shall be equipped with systems and components to enhance the public safety radio signals and achieve the

required level of radio coverage specified in Sections 510.4.1 through 510.4.1.3. Public safety communications enhancement systems utilizing radio-frequency-emitting devices and cabling shall be ~~((approved))~~ allowed by the ~~((fire code official))~~ Public Safety Radio System Operator. Prior to installation, all RF-emitting devices shall have the certification of the ~~((radio licensing authority))~~ Public Safety Radio System Operator and be suitable for public safety use.

510.4.2.2 Technical criteria. The ~~((fire code official))~~ Public Safety Radio System Operator shall ~~((maintain a document providing the specific technical information and requirements for the emergency responder communications coverage system. This document shall contain, but not be limited to,))~~ provide the various frequencies required, the location of radio sites, the effective radiated power of radio sites, the maximum propagation delay in microseconds, the applications being used and other supporting technical information necessary for system design upon request by the building owner or owner's representative.

510.4.2.3 ~~((Standby power))~~ Power supply sources. Emergency responder radio coverage systems shall be provided with dedicated standby batteries or provided with 2-hour standby batteries and connected to the facility generator power system in accordance with Section 1203. The standby power supply shall be capable of operating the emergency responder radio coverage system at 100-percent system capacity for a duration of not less than 12 hours.

[W][S] 510.4.2.4 Signal booster requirements. If used, signal boosters shall meet the following requirements:

1. All signal booster components shall be contained in a National Electrical Manufacturer's Association (NEMA) 4, IP66-type waterproof cabinet or equivalent.

Exception: Listed battery systems that are contained in integrated battery cabinets.

2. Battery systems used for the emergency power source shall be contained in a NEMA 3R or higher-rated cabinet, IP65-type waterproof cabinet or equivalent.

Exception: Listed battery systems that are contained in integrated battery cabinets.

3. Equipment shall have FCC or other radio licensing authority certification and be suitable for public safety use prior to installation.
4. Where a donor antenna exists, isolation shall be maintained between the donor antenna and all inside antennas to not less than 20dB greater than the system gain under all operating conditions.
5. Bi-Directional Amplifiers (BDAs) used in emergency responder radio coverage systems shall ~~((have))~~ be fitted with anti-oscillation ~~((prevention))~~ circuitry and per-channel AGC.
6. The installation of amplification systems or systems that operate on or provide the means to cause interference on any emergency responder radio coverage networks shall be coordinated and approved by the ~~((fire code official))~~ Public Safety Radio System Operator.
7. Unless otherwise approved by the Public Safety Radio System Operator, only channelized signal boosters shall be permitted.

Exception: Broadband BDAs may be utilized when specifically authorized in writing by the Public Safety Radio System Operator.

Point of Information

BDAs must also comply with PSERN's (www.psern.org/requirements) detailed requirements, which include channelized, minimum of 28 channels, supporting analog, P25 Phase I (FDMA), and P25 Phase II (TDMA).

[S] 510.4.2.5 System monitoring. The emergency responder radio enhancement system shall ~~((be monitored by a listed fire alarm control unit, or where approved by the fire code official, shall sound an audible signal at a constantly attended on-site location))~~ include automatic supervisory and trouble signals that are monitored by a supervisory service and are annunciated by the fire alarm system in accordance with NFPA 72. ~~((Automatic supervisory signals shall include the))~~ The following conditions shall be separately annunciated by the fire alarm system, or, if the status of each of the following conditions is individually displayed on a dedicated panel on the radio enhancement system, a single automatic supervisory signal may be annunciated on the fire alarm system indicating deficiencies of the radio enhancement system:

1. Loss of normal AC power supply.
2. System battery charger(s) failure.
3. Malfunction of the donor antenna(s).
4. Failure of active RF-emitting device(s).
5. Low-battery capacity at 70-percent reduction of operating capacity.
6. ~~((Failure of critical system components))~~ Active system component malfunction.
7. ~~((The))~~ Malfunction of the communications link between the *fire alarm system* and the emergency responder radio enhancement system.

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510.4.2.6 Additional frequencies and change of frequencies. The emergency responder radio coverage system shall be capable of modification or expansion in the event frequency changes are required by the FCC or other radio licensing authority, or additional frequencies are made available by the FCC or other radio licensing authority.

510.4.2.7 Design documents. The *fire code official* shall have the authority to require “as-built” design documents and specifications for emergency responder communications coverage systems. The documents shall be in a format acceptable to the *fire code official*.

510.4.2.8 Radio communication antenna density. Systems shall be engineered to minimize the near-far effect. Radio enhancement system designs shall include sufficient antenna density to address reduced gain conditions.

Exceptions:

1. Class A narrow band signal booster devices with independent AGC/ALC circuits per channel.
2. Systems where all portable devices within the same band use active power control features.

[W][S] 510.5 Installation requirements. The installation of the public safety radio coverage system shall be in accordance with NFPA 1221 and Sections 510.5.1 through ~~((510.5.4))~~ 510.5.7.

[S] 510.5.1 Approval prior to installation. Amplification systems capable of operating on frequencies licensed to any public safety agency by the FCC or other radio licensing authority shall not be installed without prior coordination and approval of the ~~((fire code official))~~ Public Safety Radio System Manager.

[S] 510.5.2 Minimum qualifications of personnel. The minimum qualifications of the system designer and lead ~~((installation))~~ acceptance test personnel shall include both of the following:

1. A valid FCC-issued general radio telephone operators license.
2. Certification of in-building system training issued by an approved organization or approved school, or a certificate issued by the manufacturer of the equipment being installed.

~~((These qualifications shall not be required where demonstration of adequate skills and experience satisfactory to the fire code official is provided.))~~

[W][S] 510.5.3 Acceptance test procedure and system certification. Where an emergency responder radio coverage system is required, and upon completion of installation, the building *owner* shall have the radio system tested to verify that two-way coverage on each floor of the building is ~~((not less than 95 percent))~~ in accordance with Section 510.4.1. The test procedure shall be conducted as follows:

1. Talk-back testing from a site to the King County Regional 800 MHz Radio System shall use Seattle Fire Department radio(s) and be witnessed by a representative of the Seattle Fire Department.

- ~~((+))~~ 2. Each floor of the building shall be divided into a grid of 20 approximately equal test areas, with a maximum test area size of 6,400 square feet. Where the floor area exceeds 128,000 square feet, the floor shall be divided into as many approximately equal test areas as needed, such that no test area exceeds the maximum square footage allowed for a test area.

- ~~((2. The test shall be conducted using a calibrated portable radio of the latest brand and model used by the agency talking through the agency's radio communications system or equipment approved by the fire code official.))~~

3. Coverage testing of signal strength shall be conducted using a calibrated spectrum analyzer for each of the test grids. A diagram of this testing shall be created for each floor where coverage is provided, indicating the testing grid used for the test in Section 510.5.3(1), and including signal strengths and frequencies for each test area. Indicate all critical areas.

4. Functional talk-back testing shall be conducted using two calibrated portable radios of the latest brand and model used by the agency's radio communications system or other equipment approved by the fire code official. Testing shall use Digital Audible Quality (DAQ) metrics, where a passing result is a DAQ of 3 or higher. Communications between handsets shall be tested and recorded in the grid square diagram required by Section 510.5.3(2); each grid square on each floor; between each critical area and a radio outside the building; between each critical area and the fire command center or fire alarm control panel; between each landing in each stairwell and the fire command center or fire alarm panel.

- ~~((3))~~ 5. Failure of more than ~~((one))~~ 5 percent of the test areas on any floor shall result in failure of the test.

Exception: Critical areas shall be provided with 99 percent floor area radio coverage.

- ~~((4))~~ 6. In the event that two of the test areas fail the test, in order to be more statistically accurate, the floor shall be permitted to be divided into 40 equal test areas. Failure of not more than two nonadjacent test areas shall not result in failure of the test. If the system fails the 40-area test, the system shall be altered to meet the 95-percent coverage requirement.

510.5.3 Point of Information

In accordance with Section 510.4.1, emergency responder communication enhancement signal strength coverage requirements shall be located in 90 percent of all areas on each floor of a building. For the purposes of Section 510.5.3(5), the Seattle Fire Department shall consider failure of more than 10 percent of test areas on any floor as resulting in failure of the test. For the purposes of Section 510.5.3(6), when systems fail the 40-area test, the Seattle Fire Department shall require system alterations to meet 90 percent coverage.

- ((5)) 7. A test location approximately in the center of each test area shall be selected for the test, with the radio enabled to verify two-way communications to and from the outside of the building through the ((public agency's radio communications system)) King County Regional 800 MHz Radio System. Once the test location has been selected, that location shall represent the entire test area. Failure in the selected test location shall be considered failure of that test area. Additional test locations shall not be permitted.
- ((6)) 8. The gain values of all amplifiers shall be measured and the test measurement results shall be kept on file with the building owner so that the measurements can be verified during annual tests. In the event that the measurement results become lost, the building owner shall be required to rerun the acceptance test to reestablish the gain values.
- ((7)) 9. As part of the installation, a spectrum analyzer or other suitable test equipment shall be utilized to ensure spurious oscillations are not being generated by the subject signal booster. This test shall be conducted at the time of installation and at subsequent annual inspections.
- ((8)) 10. Systems incorporating Class B signal-booster devices or Class B broadband fiber remote devices shall be tested using two portable radios simultaneously conducting subjective voice quality checks. One portable radio shall be positioned not greater than 10 feet (3048 mm) from the indoor antenna. The second portable radio shall be positioned at a distance that represents the farthest distance from any indoor antenna. With both portable radios simultaneously keyed up on different frequencies within the same band, subjective audio testing shall be conducted and comply with DAQ levels as specified in Sections 510.4.1.1 and 510.4.1.2.
- 11. **Documentation maintained on premises.** At the conclusion of the testing, and prior to issuance of the building certificate of occupancy, the building owner or owner's representative shall place a copy of the following records in the Distributed Antenna System enclosure or the building engineer's office. The records shall be available to the fire code official and maintained by the building owner for the life of the system:
 - a. A certification letter stating that the emergency responder radio coverage system has been installed and tested in accordance with this code, and that the system is complete and fully functional.
 - b. The grid square diagram created as part of testing in Sections 510.5.3(2) and 510.5.3(3).
 - c. Data sheets and/or manufacturer specifications for the emergency responder radio coverage system equipment: back up battery; and charging system (if utilized).
 - d. A diagram showing device locations and wiring schematic.
 - e. A copy of the electrical permit.
- 12. **Acceptance test reporting to fire code official.** At the conclusion of the testing, and prior to issuance of the building certificate of occupancy, the building owner or owner's representative shall submit to the fire code official a report of the acceptance test by way of the department's third-party vendor thecomplianceengine.com

510.5.4 FCC compliance. The emergency responder radio coverage system installation and components shall comply with all applicable federal regulations including, but not limited to, FCC 47 CFR Part 90.219.

[W][S] 510.5.5 Mounting of the donor antenna(s). To maintain proper alignment with the system designed donor site, donor antennas shall be permanently affixed on the highest possible position on the building or where approved by the fire code official. A clearly visible sign stating "Movement or repositioning of this antenna is prohibited without approval from the fire code official." The antenna installation shall be in accordance with the applicable requirements in the *International Building Code* for weather protection of the building envelope.

[S] 510.5.6 Wiring. The backbone, antenna distribution, radiating, or any fiber-optic cables shall be rated as plenum cables. The backbone cables shall be connected to the antenna distribution, radiating, or copper cables using hybrid coupler devices of a value determined by the overall design. Backbone cables shall be routed through an enclosure that matches the building's required fire-resistance rating for shafts or interior exit stairways. The connection between the backbone cable and the antenna cables shall be made within an enclosure that matches the building's fire-resistance rating for shafts or interior exit stairways, and passage of the antenna distribution cable in and out of the enclosure shall be protected as a penetration per the *International Building Code*.

[S] 510.5.7 Identification signs. Emergency responder radio coverage systems shall be identified by an approved sign located on or near the Fire Alarm Control Panel or other approved location stating "This building is equipped with an Emergency Responder Radio Coverage System. Control Equipment located in room." A sign stating "Emergency Responder

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Radio Coverage System Equipment” shall be placed on or adjacent to the door of the room containing the main system components.

510.6 Maintenance. The emergency responder radio coverage system shall be maintained operational at all times in accordance with Sections 510.6.1 through ~~((510.6.4))~~ 510.6.7.

[W][S] 510.6.1 Testing and proof of compliance. The owner of the building or owner’s authorized agent shall have the emergency responder radio coverage system ~~((shall be))~~ inspected and tested annually or where structural changes occur including additions or remodels that could materially change the original field performance tests. Testing shall consist of the following items (1) through (7):

1. In-building coverage test as required by the fire code official as described in Section 510.5.3, Acceptance test procedure, or 510.6.1.1, Alternative in-building coverage test.

Exception: Group R Occupancy annual testing is not required within dwelling units.

2. Signal boosters shall be tested to verify that the gain/output level is the same as it was upon initial installation and acceptance or set to optimize the performance of the system.
3. Backup batteries and power supplies shall be tested under load of a period of 1 hour to verify that they will properly operate during an actual power outage. If within the 1-hour test period the battery exhibits symptoms of failure, the test shall be extended for additional 1-hour periods until the integrity of the battery can be determined.
4. If a fire alarm system is present in the building, a test shall be conducted to verify that the fire alarm system is properly supervising the emergency responder communication system as required in Section 510.4.2.5. The test is performed by simulating alarms to the fire alarm control panel. The certifications in Section 510.5.2 are sufficient for the personnel performing this testing.

~~((4))~~ 5. ~~((Other))~~ All other active components shall be checked to verify operation within the manufacturer’s specifications.

~~((5))~~ 6. At the conclusion of the testing, a report, which shall verify compliance with Section ~~((510.5.3))~~ 510.6.1, shall be submitted to the fire code official by way of the department’s third-part vendor thecomplianceengine.com.

7. At the conclusion of testing, a record of the inspection and maintenance along with an updated grid diagram of each floor showing tested strengths in each grid square and each critical area shall be added to the documentation maintained on the premises in accordance with Section 510.5.3.

[S] 510.6.1.1 Alternative in-building coverage test. When the comprehensive test documentation required by Section 510.5.3 is available, or the most recent full five-year test results are available if the system is older than six years, the in-building coverage test required by the fire code official in Section 510.6.1(1), may be conducted as follows:

1. Functional talk-back testing shall be conducted using two calibrated portable radios of the latest brand and model used by the agency’s radio communications system or other equipment approved by the fire code official. Testing shall use Digital Audible Quality (DAQ) metrics, where a passing result is a DAQ of 3 or higher. Communications between handsets in the following locations shall be tested: between the fire command center or fire alarm control panel and a location outside the building; between the fire alarm control panel and each landing in each stairwell.
2. Coverage testing of signal strength shall be conducted using a calibrated spectrum analyzer for:
 - (a) Three grid areas per floor. The three grid areas to be tested on each floor are the three grid areas with poorest performance in the acceptance test or the most recent annual test, whichever is more recent; and
 - (b) Each of the critical areas identified in acceptance test documentation required by Section 510.5.3, or as modified by the fire code official; and
 - (c) One grid square per serving antenna.
3. The test area boundaries shall not deviate from the areas established at the time of the acceptance test, or as modified by the fire code official. The building shall be considered to have acceptable emergency responder radio coverage when the required signal strength requirements in Sections 510.4.1.1 and 510.4.1.2 are located in 95 percent of all areas on each floor of the building and 99 percent in Critical Areas, and any non-functional serving antenna are repaired to function within normal ranges. If the documentation of the acceptance test or most recent previous annual test results are not available or acceptable to the fire code official, the radio coverage verification testing described in Section 510.5.3 shall be conducted.

Point of Information

The alternative in-building coverage test provides an alternative testing protocol for the in-building coverage test in subsection (1) of Section 510.6.1. There is no change or alternative to annual testing requirements enumerated in subsections (2) – (7) of Section 510.6.1, which must be performed at the time of each annual test.

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510.6.2 Additional frequencies. The building *owner* shall modify or expand the emergency responder radio coverage system at his or her expense in the event frequency changes are required by the FCC or other radio licensing authority, or additional frequencies are made available by the FCC ~~((or other radio licensing authority))~~ Public Safety Radio System Operator or FCC license holder. Prior approval of a public safety radio coverage system on previous frequencies does not exempt this section.

510.6.3 Nonpublic safety system. Where other nonpublic safety amplification systems installed in buildings reduce the performance or cause interference with the emergency responder communications coverage system, the nonpublic safety amplification system shall be corrected or removed.

[S] 510.6.4 Field testing. ~~((Agency))~~ Seattle Fire Department personnel shall have the right to enter onto the property at any reasonable time to conduct field testing to verify the required level of radio coverage or to disable a system that due to malfunction or poor maintenance has the potential to impact the emergency responder radio system in the region.

